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CONTENTS: Vol. LVIII. No. 10 (Series No. 1,102).

PAGE	PAGE
Advertising Ideas..... 417	North-East Lancashire
Bankruptcy Reports..... 402	Dinner..... 405
Business Changes..... 387	Observations and Reflec-
Colonial and Foreign News 404	tions..... 393
Coming Events..... 426	Our Town Traveller..... 406
Commercial Tabs..... 413	Personalities..... 387
Commercial Traveller's	Pharmaceutical Fauna..... 392
Taxes..... 415	Pharmaceutical Society of
Correspondence..... 419	Great Britain:—
Deaths..... 387	Council-meeting..... 382
Deeds of Arrangement..... 402	Draft Pharmacy Bill..... 384
Dispensing Notes..... 421	Pharmaceutical Veterans 418
East Indian News..... 381	Pharmacy at Dieppe..... 416
Editorial Comments:—	Pharmacy in India by
Something to Think	George Cecil)..... 412
About..... 394	Practical Notes and
How the Metric System	Formulae..... 392
Works..... 366	Recent Patents..... 415
Unqualified Dispensers 396	Recent Wills..... 398
Notes..... 397	Reviews..... 410
English News..... 376	Round the South African
French News..... 380	Coast..... 408
Gazette..... 402	Scientific Progress..... 418
Information Supplied..... 422	Scotch News..... 380
Irish News..... 379	South African News..... 404
Legal Reports..... 399	Trade-marks Applied for... 414
Marriages..... 387	Trade Notes..... 386
Miscellaneous Inquiries .. 421	Trade of British India..... 414
New Books..... 392	Trade Report..... 423
New Companies and Com-	Westminster Wisdom..... 404
pany News..... 403	Winter Session..... 388

COLONIAL TRADE.

There is one thing more certain than another regarding the future export trade of the United Kingdom, it is that the population of our Empire beyond the seas will be our best customers. The national statistics prove this, the imperialistic spirit maintains it, and it behooves manufacturers and merchants to encourage it. The encouragement of colonial trade has been one of *THE CHEMIST AND DRUGGISTS'* strong points from the outset. Through our annual Colonial Issue we give an exceptional opportunity for advertisers to increase their business with the colonies. This issue will be on April 20, and, in addition to those who receive it weekly, it will be sent to all buyers of druggists' goods in India, Burmah, Ceylon, Straits Settlements, Federated Australia, New Zealand, South Africa, China, Japan, and the West Indies. The Publisher will give any inquirer information regarding this important issue.

Summary.

A CHEMISTS' ASSOCIATION has been formed at Torquay (p. 390). The salt-cure is the subject of an observation by "Xrayser" (p. 393).

The "Ilford" plate people have annoyed some correspondents by injudicious remarks as to chemists' prices (p. 419).

MR. J. LAIDLAW EWING, formerly President of the North British Branch, provides this week's fancy portrait (p. 392).

PARTICULARS in regard to the taxes levied on commercial travellers in different parts of the world are given on p. 415.

THE advertising ideas on p. 417 are about almanacks, circulars, and price-lists specially designed for chemists and druggists.

PHARMACY IN INDIA, as it strikes an outsider, is amusingly described by Mr. George Cecil in an article beginning on p. 412.

FURTHER EVIDENCE has been obtained by the Arsenic Commission, Mr. Gordon Salamon being the first analytical witness (p. 378).

TWELVE BOOKS are reviewed on pp. 410-411. They deal with chemical, commercial, legal, pharmaceutical, scientific, and surgical subjects.

ONTMENTS were discussed by Mr. Peter Boa and others in Edinburgh (p. 331), and Cardiff assistants also contribute to the subject (p. 391).

PATENTS for cattle food, pancreas preparations, paint-remover, and some other articles which interest our subscribers, are abstracted on p. 415.

IN the illustrated article "Pharmacy in Dieppe" a description is given of the business which English and other visitors create during the season (p. 416).

THE TRADE OF BRITISH INDIA during 1900 is dealt with in a statistical article on p. 414, wherein exports and imports of chemicals and drugs are given.

THE Scotch appeal under the Pharmacy Act as to the legality of imprisonment as an alternative to a fine for infringement has been argued in the Court of Session (p. 399).

THE CONDITION OF SOUTH AFRICAN TRADE is well reflected in an article on pp. 402-9, wherein a correspondent describes visits to Cape Town, Port Elizabeth, and Durban.

OUR "Town Traveller" has been investigating the cutting problem, the seed-selling question, typewriting-machines, shop-fittings, and the manufacture of soaps (p. 406).

A DOCTOR'S DISPENSER made santonin-powders with strychnine and three children died (p. 376). We therefore call attention once more to dispensing in doctors' surgeries (p. 366).

THE PHARMACY BILL has been extended to fifteen clauses and thirteen new provisions have been added to it. It is printed on p. 384, with the Council-debate on p. 392, and our remarks on p. 395.

MR. OTTO HEHNER gave particulars of his method of using Marsh's test for arsenic before the meeting of the London Section of the Society of Chemical Industry. The discussion is reported on p. 388.

IODINE is 1d. per oz. lower, and a substantial reduction has been made in iodides. Borax has also been reduced by the Convention. Higher prices have been paid for ipecacuanha since the auctions. Santonin is dearer (p. 423).

THE Glasgow commission-agent got the wrong medicine for a local drug-store. It injured him, and he sued for damages, which the Sheriff refused. He took the case to the Court of Session and has got 700l. (p. 400).

THE members of the N.E. Lancashire Association dined together last week (p. 405) and presented an illuminated address to Mr. T. Critchley, the President, whose portrait, with some particulars of his career, is given on p. 418.

MR. JAMES MACKENZIE returns to the pharmaceutical charge and asks members of the Society to concentrate their attention on the forthcoming election, with the view of getting the work back to the original lines (p. 419).

THE PHARMACEUTICAL BY-LAWS revised last year are to be recalled by the Council (p. 384). Mr. Dudderidge has something to say about the passing of by-laws (p. 420), and we relate some half-forgotten facts about that process (p. 397).

A New Book.

WE have reprinted our *DIARY* monograph, "Opening a Pharmacy" in book form, uniform as to binding with the "Art of Dispensing." The price is 1s. net, or 1s. 1d. post free. It is a most useful book for those who contemplate starting in business as chemists and druggists.

English News.

Local Newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Brevities.

Dr. Bernard Dyer has been appointed analyst to the Swindon Town Council.

Mr. F. A. Barrow, pharmaceutical chemist, has been appointed chemist to the Newmarket Urban District Council.

The man Thomas Harvey, charged with stealing 250 lbs. of Armour's extract of beef, has been committed for trial, bail in 400*l.* being allowed.

Horace Harvey (19), charged on remand at the Greenwich Police Court on March 1 with breaking into the shop of Mr. Edward Baldwin, chemist, of 33 Deptford Bridge, has been sent to prison for three months with hard labour.

On March 1 the question of the appointment of a dispenser for the Union again came up at a meeting of the Wolverhampton Board of Guardians, but the matter seemed to get no "forrarder," and it stands over until next meeting.

At the Guildhall on February 27, two errand-boys in the employ of Messrs. Evans, Lescher & Webb, wholesale druggists, Bartholomew Close, E.C., were remanded on a charge of being concerned together in stealing and receiving 10*s.*

The Duke of Cornwall and York attended a private meeting on Wednesday afternoon of the Executive Council of the Imperial Institute, and on their behalf presented Sir Frederick Abel, Bart., F.R.S., F.C.S., Honorary Director, with his portrait, painted for the Council by Mr. Frank Bramley, A.R.A.

A County Court action was heard at Chester on February 26, in which a Manchester cloth-merchant named Dawson sued Mr. H. D. Brandreth, lately managing director of Homocoea (Limited) for 45*l.* in respect to some shares in that company. The Judge (Sir Horatio Lloyd) reserved his decision.

A domestic servant to a dentist in Finsbury Pavement objected to cleaning the brass plates on her employer's door. She was dismissed, and claimed 1*l.* 2*s.*, a week's wages, and a week in lieu of notice, but the Deputy-Judge at the City of London Court said the dentist could hardly be expected to clean his own brass plates, and as the plaintiff did not do the work required of her she was nonsuited.

The Sanitary Committee of the Exeter City Council, having received a suggestion from the Sanitary Committee of the Plymouth Council regarding the establishment of a joint county and municipal bacteriological laboratory at Plymouth, decided to approve the establishment of the laboratory, but to express the opinion that as Exeter is the capital of the county, preference should be given to the establishment of such an institution at Exeter. The City Council, at their meeting last week, approved the committee's action.

The case against Messrs. W. J. Bush & Co. (Limited), Artillery Lane, Bishopsgate, in regard to the fence of their new building in Sheep Lane, Hackney, was disposed of at the North London Police Court on Wednesday. The case for the Council was that the necessary plan was submitted too late. Mr. Macmorran, K.C., for defendants, said it was a purely technical offence. Mr. Fordham held that the Act contemplated the production of the plan before any new building was begun, and fined defendants 3*l.* 3*s.* with 2*l.* 2*s.* costs.

Fires.

An outbreak of fire took place at Messrs. McDougall's Chemical-works, Chadderton, on February 28, and damage estimated at several hundred pounds was done.

Last week a fire occurred at the chemical-works of Messrs. Major & Co. (Limited), at Rough Hills, Wolverhampton, owing to one of the vessels used for distilling springing a leak. The fumes found their way into a flue, and a loud explosion followed, a large quantity of the brickwork being blown out, and the flames spread in every direction. The Wolverhampton fire-brigade put out the flames. A considerable amount of damage was done.

An outbreak of fire occurred on February 26 in a store-house at the back of the shop of Mr. E. A. Hay, chemist and druggist, at Alexandra Terrace, Millfield, Sunderland. The accidental dropping of a lighted match into a barrel of turpentine is supposed to have been the cause, and two barrels of turpentine, two drums of glycerin, five drums of oil, and a cask of red ochre were destroyed before the conflagration was subdued. At the outset a plucky but unsuccessful attempt to put out the fire was made by Thomas Campbell, one of Mr. Hay's assistants.

Medicine-mistakes.

An inquiry held at Swansea on March 2 into the circumstances of the death of a young mining-engineer named Rosser, revealed the fact that he had died from carbolic-acid poisoning, the result of a dispensing mistake of Dr. Daniel Evans, his medical adviser. Dr. Evans in his evidence admitted the mistake, and accounted for it by stating that he put the label intended for a draught which he had prescribed for deceased on a bottle containing pure carbolic acid which he was going to use in another case of suspected diphtheria. The bottle containing the draught was the same size and shape and the contents the same colour as that of the carbolic acid. A juror asked the doctor if he did not label a bottle when it contained poison. Dr. Evans replied that he alone was going to use the carbolic acid, and did not label it. The jury found a verdict of death by misadventure.

At Normanton on March 1 the deaths of three children, aged 1 year and 10 months, 3 years, and 4 years 9 months respectively, was inquired into. They were the children of a colliery blacksmith named Artle, and the mother stated in evidence that she had consulted Dr. Mackenzie about the youngest, who was suffering from worms. His dispenser, James Bryan Kennedy, gave her two powders for the child, with orders to give one at night, and a dose of castor oil the next morning. The powders did the child good, and she saw Dr. Mackenzie some days afterwards, told him the child was better, and asked for some more. The doctor sent her to Mr. Kennedy, who gave her three powders. She gave the child one of these when she got home, and it died in an hour afterwards. Dr. Mackenzie came after the death, and the child was buried in due course. Some days afterwards, suspecting the other two children also had worms, she gave each a powder, and they both died with the same symptoms as the younger one. Dr. Mackenzie, in his evidence, deposed that he gave a certificate for the youngest child as having died from intestinal worms and convulsions. When informed of the death of the other two children, and the symptoms had been described, he came to the conclusion that they must have been poisoned. He spoke to Mr. Kennedy, suggesting he must have given strychnine in place of santoin. Mr. Kennedy denied that. He looked around, and then found that the bottle of santoin and the bottle of strychnine were on the same shelf. He looked there because Mr. Kennedy told him he had taken the powder from there. The usual place for the strychnine was on the top shelf, and for the santoin on the lowest shelf. He suspected strychnine had been given, but Mr. Kennedy was positive. He was surprised at seeing the bottles together, but Mr. Kennedy said they had been there for some time. Mr. Kennedy was his dispenser and was not a doctor, and had dispensed for some years, although witness always dispensed when he was there. It was quite possible the bottles might be moved without his or Mr. Kennedy's knowledge. Mr. Kennedy had been with him for four and a half years, and was a very good dispenser. Dr. Stewart, who had been called in to see the elder children, said the symptoms pointed to strychnine-poisoning. Mr. Kennedy in his evidence said he was positive he had made no mistake, and Dr. Hermon, who had made a *post-mortem* examination of the exhumed body of the youngest child as well as the elder two, deposed that he could find no trace of an irritant poison at all, but strychnine was not an irritant. He had come to the conclusion, however, that death was due to strychnine-poisoning. The inquest was adjourned for an analysis of the contents of the stomach to be made, when Mr. E. M. Chaplin, D.Sc., deposed that he had found distinct evidence of the presence of strychnine in the viscera of the youngest child. He had also examined a sample of santoin from which it was said

the powders were made, and had found it free from strychnine. After further evidence had been given, Mr. Kennedy asked to be allowed to make a statement. This the Coroner, after a caution, permitted him to do. He then made the following statement:—

You remember, gentlemen of the jury, how positive I was on the last occasion that I had not used the wrong bottle. I am compelled to admit now, in view of the analysis of the child's stomach, that I must have taken down the strychnine-bottle instead of the santalin-bottle. By this inadvertence on my part I was the means of bringing about this most sad and regrettable misadventure, which no one deprecates more than myself, or feels so acutely.

The Coroner having summed up, the jury found that the deaths of the three children had been caused by the administration of strychnine through misadventure, and they recommended that in future all bottles containing poison should be kept distinct and separate from other bottles.

Chemists in Public Life.

Mr. William H. Gooch, chemist, Dedham, has been elected a member of the Parish Council.

Mr. L. Jones, chemist, Aberayron, has been again elected to the Cardiganshire County Council.

Amongst the unopposed returns to the Breconshire County Council is Mr. E. J. Davies, chemist, New Quay.

Mr. J. Nickson, chemist and druggist, Ludlow, has been re-elected one of the elective auditors for the borough.

Mr. John Brooks, chemist and druggist, 227 High Street, East Ham, has been elected to the Essex County Council.

Mr. Lewis B. Ross, pharmaceutical chemist, Driffield, has been returned as a member of the Driffield School Board.

Mr. Joseph Fletcher, chemist and druggist, Scunthorpe, has been elected a member of the Lindsey County Council.

Mr. A. Lee Hall, chemist and druggist, Winchcombe, Gloucestershire, has been recommended for the magisterial Bench.

Mr. B. Crowther, manufacturing chemist, Gomersal, has been re-elected a member of the West Riding County Council.

Mr. J. V. Mainprize, chemist, Bridlington, has been returned to the East Riding County Council for the Flamborough Division.

Amongst those who were successful at the London County Council elections on March 2 were Lieut.-Col. Clifford Probyn, Mr. R. A. Robinson, Mr. R. Strong, Mr. C. Goddard Clarke, Mr. E. J. Horniman, Mr. B. S. Straus, and Mr. J. McDougall.

Professor Leech's Successor.

At a Council-meeting of Owens College, Manchester, held on February 20, Mr. R. B. Wild, M.D., M.Sc., M.R.C.P., was appointed professor of materia medica and therapeutics, subject to the approval of the Court. The Council also decided that the name of the late Dr. Leech, who held the chair of materia medica and therapeutics for nineteen years with great benefit to the medical school, shall henceforth be associated with it, and that the professorship be called the "Leech Professorship of Materia Medica and Therapeutics." Dr. Wild qualified from Owens College as L.S.A. in 1884, and as M.R.C.S. in 1885. In the following year he took M.B. London, with fourth place in honours in medicine and forensic medicine, and in 1887 he took the M.D., qualifying for the gold medal. He graduated as B.Sc. with honours in physiology at the Victoria University in 1883, and the M.Sc. in 1894. Our readers will recollect Dr. Wild's investigation of the pharmacology of ipecacuanha alkaloids which he examined at the request of Messrs. Paul and Cownley. He had acted as assistant to the late Professor Leech for several years, and had also been an examiner in medicine to the London University.

Sheffield College of Pharmacy.

On March 1 the students of the Sheffield College at Pharmacy visited the extensive gardens and glass-houses of Councillor F. Kelley, at Holly Court, Ecclesall. A large

number of rare plants in flower or fruit were inspected. The leaves of the nepenthe (*Thalictrum flavum*), pitcher-plant *Platyecium* (staghorn-fern), crotons, and alocasia were noted for their curious forms. The afternoon was fine, and the outdoor lesson was instructive and much appreciated.

Inter-Collegiate Football League.

The fixture between the Metropolitan College and London College teams took place on March 2 at Shepherd's Bush before a large company. Both teams were at full strength, and the match was specially important, as the victory of either team practically decided the holders of the League Cup. The interest in the match was enhanced by the inability of the London team to beat the Square on the previous Saturday. Following the kick-off the Metropolitan team pressed, and quickly scored. After this the pace of the game increased, and London attacked hotly, although the leaders were playing a great game. Nothing more was scored, however, until the teams crossed over, when within a minute of the interval the London men equalised. Again attacking strongly, Davis scored from a penalty kick after the goal-keeper had partially cleared, and London led by 2 to 1. It was then the "Metro's" turn to attack vigorously, and, the full back of the opposing team handling the ball, a penalty followed, from which Harrod scored, thus making the game 2 all. From this point both teams made great efforts to obtain the winning-point, but nothing further was scored, and the game ended in a draw as stated.

Store-prices.

The Army and Navy Stores (Limited) intimate the following new prices:—

Allnut's fumigating-paper, 4d. per packet; carbolic acid, No. 5 3s. per gal. tin; Lozone, 3s. 2d. per bottle; "Cameo" racks for medicated paper, 1s. 7d. each; Hall's wood-violet, large size, 17s. per bottle; "Perfected" tooth-brushes, 7d. each, 6s. 9d. per dozen; Plasmon cocoa, 8½d., 1s. 3d., and 2s. 4d. per packet; Vitalia meat-juice, 10½d. and 2s. 2d. per bottle; spirit of turpentine, 8d. per pint bottle; dental electric lamps, 17s. 6d. and 24s. each; "Gem" menthol inhalers, 9½d. each; formalin lamps, "A" copper, 7s. 9d. each; Kepler's solution of cod-liver oil in malt-extract, with chemical food, 2s. 6d. and 4s. 8d. per bottle; eau de Cologne (Madonna brand), 1s. 4d. per 4-oz. bottle, small wicker 2s., medium ditto 3s. 10d.; Icilmia Rosee, 4s. 6d. per bottle; Zotal, 10d. per bottle, 3s. per gal.

Frame-food biscuits and Vimbos have been discontinued.

Food and Drugs in the City.

The Public-health Department of the City of London report that last year 168 samples were analysed under the Sale of Food and Drugs Acts. According to the last census the population of the City was 37,000, while 400,000 persons were employed there daily, and upwards of a million entered it each day. The Board of Agriculture have intimated that the number of samples taken is inadequate, and suggests that the Corporation appoint a responsible inspector to take not fewer than 500 to 600 samples annually, and that he should be encouraged to add to that number.

London City Analyst.

At a meeting of the Court of Common Council last week the Sanitary Committee recommended that the remuneration of the analyst should be at the rate of 10s. per analysis, the minimum remuneration to be on the basis of 400 analyses per annum, and, further, that the public analyst be paid at the same rate for every sample of food or water analysed by him over the 400. It was also agreed that the analyst should provide his own laboratory and chemicals. An amendment was moved: "That, in the opinion of the Court, it is desirable to appoint a bacteriologist, and that it be referred to the joint Sanitary and Officers and Clerks Committee to consider and report on the duties and emoluments of such an appointment, and as to whether the position of public analyst and bacteriologist might with advantage be held by the same person." The amendment was withdrawn, however, on the understanding that it would be discussed at a later date, and it was ultimately resolved that the Sanitary Committee submit the names of three candidates for final selection.

Notes from Birmingham.

The General Medical Council has asserted itself, and Dr. Irvine has resigned his appointment as consultant to the new institute founded by the Hospital Fund Association. Nothing daunted, the managers are to advertise for a successor.

The son of Mr. H. W. Jones (of Messrs. Wyleys, Limited, Coventry) has just completed his medical course, and gained qualification with honours. He is a candidate for the post of house-surgeon in one of the principal hospitals in the Midlands.

The Photographic Society gave its annual exhibition of pictures and apparatus at the Society of Artists last week. Amongst the exhibitors were Messrs. Marlow (Constitution Hill, Birmingham), Southall, and Baignton (successor to Mr. Hume, optician, New Street).

While the Pharmaceutical Society is demanding the addition of Euclid, algebra, and modern languages in its matriculation, Principal Lodge, of Birmingham University, asserts emphatically that to teach Euclid is to waste a lad's time. "Give boys pure and unalloyed science," says the principal.

The seventh annual excursion of the Birmingham University Chemical Society took place on March 7, when visits were made to the silver and electro-plating works of Messrs. Elkington & Co., to the Birmingham Sewage Works, Saltley, and to the works of Messrs. Hill, Evans & Co., vinegar and British wine manufacturers, at Worcester.

Messrs. Boots (Limited) have ceased to close their New Street shop on Wednesdays at 4 o'clock, since it was announced that Messrs. Arblaster & Churchill would not conform to the agreement arrived at amongst the central shopkeepers. Gooch Street, however, is like a deserted village after 2 P.M. on Wednesdays.

Fear having been expressed that the Midland Institute School of Commerce and the University Faculty for Commercial Training might be antagonistic, it has been publicly stated that the latter is for men of business and the former for their clerks. These classes, which are held in the evening, should be found useful to the junior pharmacist who has had little training in the broad principles of trading.

At a meeting of the Birmingham and District Mineral-water Trade Protection Association (Limited) on March 5, it was stated that the question of bottle-changing and price-agreements had occupied the attention of the Council. At a meeting of the trade in the summer a resolution was passed in favour of such a scheme, and an agreement was prepared, but on application for signatures only twenty-one signed it. A fresh agreement had now been drawn up altering the minimum price, it being understood that a notice would be issued to the trade stating that the prices charged would remain as at present, but that a deposit-charge of 6d. per dozen on pints and 3d. per dozen on half-pints or under would be made. All members were urged to sign the agreement, which was strongly supported by Mr. Johnson (President of the National Union of Mineral-water Manufacturers). Most of the members present signed the agreement, and the Chairman intimated that a personal canvass would be made of the absent members. A correspondent says: "This reminds one of the need of such to the pharmacists, for in this hive of 750,000 busy bees there must be room for such an institution for the collection, cleaning, and sorting of medicine-bottles and restoring them to the owners whose names are moulded on on them." *Verbum sapientibus.*

The Arsenic Commission.

A second sitting of the Royal Commission on arsenic in foods was held on March 1, when the principal witness examined was Dr. James Niven, medical-officer of health for Manchester. In the course of his examination, Dr. Niven was asked by Dr. Thorpe if there was any possibility of arsenic being present in bottled mineral waters. Dr. Niven said an acid phosphate is made by acting on bone-ash with sulphuric acid, which is used to flavour mineral waters, but he was satisfied that nothing of the kind occurred in Manchester, because he knew the sources of the bone-ash and of the sulphuric acid, and he was satisfied arsenic could not have entered into that material. Samples of jams, sweets,

and mineral waters have been examined for arsenic, but none found. The highest amount of arsenic ascertained in beer had been about $\frac{1}{2}$ gr. per gal. The quantity of arsenic in malt was equivalent to $\frac{1}{15}$ gr. per gal. In exceptional cases in Liverpool and Manchester as much as $1\frac{1}{2}$ gr. of arsenic per gal. had been discovered, so that the consumption of a pint of beer daily meant $\frac{3}{16}$ gr. of arsenic, a quantity which would produce marked symptoms. His opinion was that it was quite possible to obtain brewing-materials for all practical purposes entirely free from arsenic. The arsenic got into the malt by the process of kiln-drying, being deposited by the fumes coming from the fuel used. The first requisite was to see that there is no arsenic in the fuel used. In a number of yeasts which had been examined it was found that a large amount of arsenic existed, but the quantity had not been exactly estimated.

The Commission met again on March 6, when Dr. E. W. Hope, Medical Officer of Health for Liverpool, was examined, and spoke as to the facts of the outbreak of arsenical poisoning there. He held that the doctrine of a negligible minimum of arsenic was most dangerous, and there should be no arsenic in beer at all. Mr. A. Gordon Salamon, F.I.C., F.C.S., one of the Expert Committee appointed by the Manchester Brewers' Association, was also examined, and, in the course of his evidence, dealt with the origin of the arsenic—not, however, adding to already recorded facts. Speaking of the tests for arsenic, he said, in reply to Dr. Thorpe, that seven tests were used, but they had to be modified, because symptoms held to be indicative of arsenic were found to be due to another cause, and because they seemed to exclude beer made solely from malt and hops. Blackening of copper was held to be proof of arsenic, but it is now known not to be so. The test devised by the committee was most effectual over a large district. He wished to defer his general recommendations; but he would say that sulphuric acid ought not to be made from pyrites unless there be proof of the exclusion of arsenic. Mr. Salamon's examination was adjourned.

The Analysts' Reply.

At a meeting of the local section of the Society of Chemical Industry, Manchester, on March 1, Mr. W. Thomson read a paper on "The Detection of Arsenic in Beer, Brewing-materials, and Food." Replying to recent criticism on the Manchester analysts, Mr. Thomson said the small fee analysts received did not allow of them making elaborate and apparently unnecessary analyses. An analyst would naturally not look for potent poisons in food which was not alleged to have produced poisoning. There was some talk about pure acids in the course of the discussion, and Mr. Carter Bell said he had no difficulty in the matter. He got his acids from Messrs. Woolley.

Ethics of Prescribing.

At Tooting on February 25, Mr. Braxton Hicks held an inquest on the body of a child which died some time after it had been given medicine obtained from Mr. J. P. Pennock, chemist and druggist, of High Street, Tooting. In reply to the Coroner the mother said she did not consult a doctor because she did not think the child ill enough to necessitate that. The Coroner: If the deceased was bad enough to be taken to a chemist, surely she was bad enough to be taken to a doctor? A chemist knows nothing really, except what he says he knows. Here is a man who does not even examine the child, and yet pretends to prescribe for her. Mr. Pennock, who was sent for by the Coroner, deposed to selling the mother of deceased a simple cough-mixture for the child. He did not examine deceased. The Coroner: If you examine a child and find out whether it is a case of bronchitis or pneumonia, then you can prescribe for it, but if you do not examine it, then you see the danger. I only ask you if you think it wise to prescribe for a patient whom you have not examined?—Witness: Perhaps not. The Coroner: That is my opinion, and I think you will see the force of it yourself. You might have given the child something that would have done it a great deal of harm. I would only ask you not to prescribe for people, but to send them to a doctor, and I only wish to draw your attention to the danger of doing it.—Witness: Oh, yes, sir. The Coroner, addressing the jury, observed that he was sure from what they all knew of Mr. Pennock in Tooting that he would use every

care—(hear, hear)—but he (the Coroner) had thought it wise to bring the matter before him and he knew his remarks would be taken in good part. (Hear, hear.) Death from natural causes was the verdict.

The Wicked Prescriber.

At an inquest held at Wolverhampton on February 25, on the body of a child aged 2 years and 5 months, named Howell, it transpired that deceased drank some boiling water from a kettle, and the mother took it to a drysalter named Arthur Darnborough, of Horsley Fields, who advised her to give it some lime-water mixed with milk, which she did. The next day the child died in hospital, and the house-surgeon stated in his evidence that the child was so badly scalded that an operation was at once performed to enable it to breathe, but lime-water and warm milk was a good thing to recommend. Mr. Darnborough, who said he was a drysalter and not a chemist, stated that he told the mother that if the child was no better to take it to a doctor or to the hospital. His shop was not fitted up like a chemist's. The Coroner told Darnborough he had acted very injudiciously in prescribing for the child. He believed no mention was made of the doctor or the hospital. The jury, in returning a verdict of death from shock, asked the Coroner to censure Darnborough for prescribing for the child, which the Coroner did.

Carter's Not the Cause.

At an inquest held before the Manchester City Coroner on March 4, touching the sudden death of a man named James Grieve, it was stated that he had taken some pills the night before he died. After the last witness had been examined, a jurymen said, "You did not ask what pills were taken." The Coroner: I do not want to know. Would it make any difference? Would it alter your opinion? If you think the pills caused the man's death, I will have a *post-mortem* examination. The man had been ill a long time. He took the pills at night and died the next afternoon. If the pills had been the cause of death, you would expect them to have produced some effect before that hour. The Widow: They were "Carter's little liver-pills." The Coroner: I do not know anything about them; but if you think they have caused this man's death, and that they contained some injurious ingredient, you can have further evidence. Another Jurymen: I have taken "Carter's little liver-pills" for years, and they have never injured me. Ultimately a verdict of death from natural causes was returned.

Cyanide Fatality.

At an inquiry held at St. Albans on February 28 into the death of an assistant-schoolmaster named Vincer, the evidence showed that deceased had accidentally swallowed a solution of the cyanides of potassium and silver. Immediately after discovering his mistake deceased rushed into the shop of Mr. A. C. Wells, chemist and druggist, High Street, St. Albans, and managed to gasp that he had taken silver cyanide. Mr. Wells immediately endeavoured, with the help of another customer who was in the shop at the time, to administer to deceased an ounce of ipecacuanha wine diluted with water. He then quickly prepared a solution of hydrated peroxide of iron and gave that also. Meanwhile, Mr. Wells had sent for a doctor, who omitted to bring his stomach-pump, so Mr. Wells sent him back for it. Another doctor arrived in the meantime, but in spite of all efforts Vincer died from prussic-acid poisoning within ten minutes of his entering the pharmacy.

The Week's Poisonings.

The fatalities from poisoning reported during the week number fifteen. Besides the fatal mistakes in doctors' dispensaries dealt with elsewhere, two carbolic-acid poisonings have taken place, two have been occasioned by laudanum, one each by oxalic acid and chloroform anaesthesia, and three by prussic acid. A doctor and his son poisoned themselves together, using the latter poison; and it was also used by Alfred Henry Johnstone, an assistant in the employ of Mr. J. G. Richards, chemist and druggist, High Street, Hastings. The only unscheduled poisons causing death (and both were misadventures) were caustic soda, taken in mistake for ginger-beer, and turpentine, in place of a glycerin-and-peppermint bronchitis-mixture.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Pharmaceutical Society of Ireland.

All applications for the April examinations must be lodged (with the other necessary papers) with the Registrar by 11 o'clock A.M. on the following dates:—For Preliminary examination, on Tuesday, March 19; for Pharmaceutical Assistant and Registered Druggist examinations, on Tuesday, March 26; for Pharmaceutical Licence examination, on Wednesday, March 27.

Fire.

On March 2 a fire broke out on the premises of Messrs. Boileau & Boyd, wholesale druggists, Bude Street, Dublin. The Fire Brigade was promptly in attendance, and prevented much damage being done.

Linseed-meal.

At Crumlin Petty Sessions on March 4, Mr. E. J. Johnston, Crumlin, was charged with selling deficient linseed-meal. The case was dismissed, the defence being that linseed-meal was not an article of food, and as pure linseed-meal was not asked for linseed-cake meal was supplied.

Royal Society Meeting.

At the Royal Dublin Society on March 1 Professor Barrett, F.R.S., lectured on "Röntgen Rays: Recent Developments and Applications in Surgery," and mentioned the fact that Mr. R. J. Moss, the Registrar of the Society, was one of the first to experiment on the rays in Ireland.

Drug-tenders.

The Guardians of the following Unions require tenders for medicines and medical-appliances for the year ending March 31, 1902. The dates given are the latest on which the tenders will be received:—Lurgan (March 14), Newtownards (March 15), Ballymoney (March 28).

Effect of the Schedule.

Dr. W. A. Cummins has again complained to the Cork Guardians of the difficulty of obtaining drugs not mentioned in the L.G.B. schedule. A child suffering from an eye-affection had to be sent to the eye-hospital, as the drugs required for treating the disease were not available at the Workhouse hospital.

Laudanum-poisoning.

A Llanelly solicitor was found dead in bed at O'Meara's Hotel, Waterford, on February 27. He had purchased a 2-oz. bottle of laudanum from Mr. O'Sullivan's shop, the Quay, Waterford, saying he was in the habit of taking the drug for insomnia. The verdict at the inquest was "Died from an overdose of laudanum."

Dispensers' Appointments.

The Belfast Board of Guardians notify their intention of appointing an apothecary to the Union at a salary of 80*l.* a year, with rations and quarters.

Mr. Liston, L.P.S.I., the Medical Hall, George's Street, Limerick, has been appointed substitute apothecary to the Limerick Board of Guardians at a salary of two guineas a week.

Business Alterations.

Messrs. Leybourne & Clendenning, pharmacists, Rathmines Road, Dublin, have removed to larger premises higher up on the same road.

Mr. James A. Stewart, L.P.S.I., late of Belfast, has taken new premises at Charlemont Street, Dublin, and will start business there in the course of a few days.

The Harcourt Pharmacy, Harcourt Road, Dublin, is undergoing extensive repairs and improvements which, when finished, will convert it into an up-to-date medical hall.

Liquidation Sale.

In the Chancery Division, Dublin, last week, an application was made to the Vice-Chancellor for permission to sell the premises of Messrs. Byrne & Shaw, chemists and mineral-water makers, Kevin Street, Dublin, in liquidation. An order for the sale had previously been given, but it transpired that the property was mortgaged and the title-deeds not available. A fresh order was made to dispose of the concern, the proceeds to be lodged in Court.

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

A Medicine-mistake.

At Aberdeen on March 1 a young woman named Stephen accidentally drank some aconite and belladonna liniment in mistake for medicine. She is in a critical condition in the Royal Infirmary.

Summer Side-line.

Mr. Alexander A. Adam, chemist and druggist, Airlie Street, Alyth, has laid down complete plant for the manufacture of aerated waters. He is using the Berkefeld filter for the water.

Personal.

Mr. Alexander Mackie, chemist and druggist, lectured on "The Air we Breathe" to the members of the Methlick Mutual Improvement Association on February 26.

Mr. Ivion Macadam has been appointed chemist to the Kelso Analytical Association in place of his late father, who had held the appointment since the Association's formation in 1859.

A Penal Sentence.

In the High Court of Justiciary, Edinburgh, on March 4, a man named William Mackenzie was sentenced to seven years' penal servitude for stealing from a number of Aberdeen tradesmen, amongst them being Mr. William Davidson, wholesale druggist, Castle Street, Aberdeen. Prisoner had been nine times previously convicted.

A "D. & F." Social.

The employes of Messrs. Duncan, Flockhart & Co. held their annual social gathering on March 1 in the Free Gardeners' Hall, Picardy Place. Mr. J. E. Carmichael presided at the concert, which was largely attended. Dancing was kept up till the early morning under the direction of Messrs. Kinninmont and Campbell.

The Glasgow Exhibition.

This exhibition is now well advanced, and already exhibits are beginning to arrive. Arrangements are in progress for the opening ceremony, which, as announced last week, will be performed by the Duke of Fife, who will be accompanied by H.R.H. the Duchess of Fife. The demand for season tickets appears to have been unprecedented, and it is said that their issue may be suspended, or the price increased.

Festive Chemists.

On February 23 the employes and friends of Messrs. W. R. Hatrick & Co., wholesale druggists, Glasgow, to the number of about 100 held their annual dance in the Albany Galleries, Charing Cross, Glasgow. During an interval Mr. W. L. Hatrick, in a few appropriate sentences, welcomed the large company, and Mr. W. L. Currie and others contributed songs. A most enjoyable evening was spent, and dancing was kept up till 2 A.M. The duties of master of ceremonies were well performed by Mr. James Kirke.

Glasgow's Scourge.

The small-pox epidemic, which seemed to be well in hand up till ten days ago, has again broken out with virulence, and in the first three days of this week close on eighty new cases were taken into the hospital. It appears that so far

only half the population of the city have been revaccinated, and these chiefly the younger portion of the community. The result is now seen in the fact stated by the medical officer of health, that the majority of the cases admitted last week were persons upwards of 40 years of age. The increasing attention being drawn to the subject will, of course, lead to a renewal of the rush for re-vaccination, although necessarily on a smaller scale than was the case a month ago.

The Kinninmont Prize.

The examination (which is a written one, the subjects being botany, magnetism, and electricity) for this annual prize will be held in Glasgow in May or June. Assistants in Glasgow and the counties of Argyle, Ayr, Bute, Dumbarton, Dumfries, Kirkcudbright, Lanark, Renfrew, and Wigtown, who have qualified two years previous to the examination will be eligible to compete. Assistants who have served their apprenticeship in these districts, but have removed outside the radius within twelve months of the examination, will also be eligible. Intending competitors should send in their names to the secretary, Mr. W. L. Currie, 223 Byres Road, Dowanhill, Glasgow.

Sale by Auction.

In the *Scotsman* of March 4 the stock and fittings of the shop at 30 Leith Street, Edinburgh, lately occupied by Mr. R. M. Kerr, chemist and druggist, are advertised for sale. The stock includes, amongst other things, "one hundred and forty drawers and eight shuttles containing medicines and drugs, show-case containing one thousand or thereby scents, patent medicines and other articles, shop-case full of druggist's goods, mahogany shop-counter, large mirror in gilt frame; another show case containing patent medicines, powders, scents, and other druggist's articles, two sets of beams and scales with weights; two thousand bottles, various, containing medicines; and a large quantity of chemists' and druggists' miscellaneous articles." The public sale of a chemist's shop is something unique in the Northern capital.

French News.

(From our Paris Correspondent.)

EXTENSIVE THEFT OF TOOTH-BRUSHES.—The police here are engaged on a case of extensive theft of tooth-brushes and combs from the warehouse of M. Dupont, the well-known Paris brushmaker. The alleged culprits are two of the firm's employes, and the defalcations amount to 20,000f. (800l.). Two dealers, who are accused of buying the stolen goods, have been arrested but liberated on bail.

A MYSTERIOUS DRAMA took place some days ago at the little town of Cagnes, situated between Grasse and Nice in the Alpes Maritimes district. The victim was Dr. Curel, a local physician of 65 years of age, who was shot dead on the threshold of his own house on answering a knock at the door. The murderer disappeared, and the neighbours sent for the doctor's friends, including M. Latty, a pharmacist. When the latter was on his way to the house he was met by a man, who, after passing him, turned round and fired a revolver at him, fortunately without result. This man, who is supposed to be the doctor's murderer, has not been arrested.

DEATH OF A WELL-KNOWN PHARMACIST.—The news of the death of Mr. Charles Deschodt, the pharmacist of the Municipal Hospitals of Roubaix, has been received with much regret in pharmaceutical circles in Paris. The deceased had a distinguished career, and was Vice-President of the Roubaix Hygiène Commission. At the funeral an address was delivered by Mr. Vanvert in the name of the Syndicate of Pharmacists of the Nord. M. Deschodt spent a long and active life in Roubaix, and at the close of the cholera epidemic of 1866 was the recipient of two medals, one from the Government and the other from the town of Roubaix.

PHARMACY MANAGED BY AN ASSISTANT.—The syndicate of pharmacists of Lot and Garonne have prosecuted in the Court and secured a fine against an assistant who acted as manager of a pharmacy at Agen. The proprietor himself

secured a position in a pharmacy at Bordeaux, but continued his Agen pharmacy with the assistant in charge. The defence was that the pharmacist was on the point of selling his business, and that he had since done so. The Court held that the assistant, in illegally exercising the privileges of a pharmacist, had caused a damage to the syndicate which he should make good. The Court fined the assistant 500f. for illegally practising, and awarded a further 100f. as damages to the syndicate. They did not order the closing of the pharmacy because the proprietorship had since changed hands, and everything was now in proper order. The comment among pharmacists is that the party to have been mulcted in damages should certainly have been the proprietor, who may be supposed to have obtained most benefit from the infringement of the law.

THE PHARMACIEN'S BURDEN—Too great haste to be rich has been the undoing of a young Paris pharmacy student, Roland by name, but it must be admitted that his methods richly deserved the retribution he has received. A well-connected young man from the country, his future seemed promising; but he took a preference for exploiting pharmacists instead of the narrow path of professional study. This was his method: he went to a pharmacy and ordered various remedies for his mother, adding that she was very ill. Then going to the address he had given, he waited outside for the pharmacist's messenger. As the latter arrived, Roland pretended to be feeling for his purse. "Oh, you are from the pharmacist?" said he. "Take the medicine quickly up-stairs to mother—fifth floor, right-hand door. I will follow you directly after making a small purchase." Then suddenly, "By the way, I have forgotten my purse, just lend me ten francs, and tell my mother to refund it with the cost of the medicine." Thus taken off his guard the messenger generally gave the ten francs, or what money he had, only to find, on arriving at the fifth floor, that the whole thing was a hoax. Finally, the complaints against the young man became so numerous that the police were on the watch, and he was arrested when in the act of ordering more medicine for his afflicted mother, "whose condition was becoming rapidly worse." In remarking on this case a well-known pharmacist told me that this was how we get caught by not always having the commercial instinct and consequent suspicion sufficiently developed; but then so many pharmacists are anxious for the professional element in their calling, and such little burdens have to be borne with philosophy.

A HEAVY SENTENCE.—In the Nancy Court of Appeal M. Petigny, a pharmacien of Monthureux-sur-Saône, has been sentenced to six months' imprisonment and a fine of 11,000f. as the result of a dispensing-error. He has been in business for twenty-five years as pharmacien, and is an Assistant Justice of the Peace for the locality. The accident was due to the fact that extract of opium had been placed in a pot which had contained ipecacuanha, and by an oversight the label for the latter ingredient was not removed. On three different occasions M. Petigny dispensed extract of opium for ipecacuanha in making up a syrup for children, without remarking the difference. The first victims were two infants aged 17 and 3 months respectively, who had been given some of the preparation. The next day another baby of 17 months succumbed, and a few hours later another child of 3½ years died after taking two spoonfuls of the syrup. A local physician, Dr. Boyé, discovered the cause of the error, and M. Petigny endeavoured to have the matter hushed up, but the police already had cognisance of it. Professors Schlagdenhauffen and Garnier, of the Nancy School of Pharmacy, in their evidence showed that the dose of opium absorbed by the victims was more than sufficient to kill them. The fine of 11,000f. will be divided amongst the parents. M. Petigny kept his pots containing opium and ipecacuanha in the poisons cupboard on the same shelf, but the whole trouble turned on the negligence in omitting to change the label when putting opium in the ipecacuanha-pot. It was not until five days after the first two victims had died that the dispensing-error was discovered.

A POPULAR SOOTHING DRINK in the Potteries for a bad throat is made by adding 1 oz. of best gum acacia to 1 pint of barley-water, with or without the addition of sugar and lemon.

East Indian News.

BOMBAY, February 9.

HEMP DRUGS.—The form of licence which it is proposed to legalise by means of the Hemp Drugs Bill about to be introduced, contains provisions prohibiting the sale of intoxicating drugs to children.

TATA RESEARCH INSTITUTE.—Professor Ramsay will complete his report on this institute during the voyage between Aden and Bombay. It is said he is in favour of Bangalore as the most suitable place for the institute.

THE BAZAAR firms report a fair business week, with some activity in perchloride of mercury and quinine. Observers of past visitations of plague and their influence on native business are much concerned as to the next month or two.

ADULTERATED MINERALS AND OILS.—A Bombay Customs circular notifies that adulterated white-lead, white-zinc, red-lead, and similar compounds, also linseed oil and turpentine, need only be marked "reduced," "mixed," "boiled," or "mineral," unless the adulteration amounts to 50 per cent., and then the exact percentage must also be given.

SESAME CROPS IN THE BOMBAY PRESIDENCY.—The total area of sesame-crops under cultivation in the Bombay Presidency is officially returned at 948,000 acres, which is about double that of last year's abnormally low area, and 12 per cent. over the average of the preceding nine years. The outturn is estimated at 143,000 tons, or 39 per cent. over the average.

DISINFECTANTS FOR BOMBAY.—The following contracts for disinfectants for the Bombay Municipality (1901-1902), have been decided:—

Messrs. Essufalli Abdulalli & Co., carbolic-acid powder at 8r. 12a. per box of 200 lbs. Messrs. John Fleming & Co., "Sanitas" powder at 21r. 8a. per cask, and carbolic acid at 1r. 10a. per Imperial gal. Messrs. Thomson & Taylor, disinfecting-fluid at 1r. 8a. 10p. per gal.

The committee who decided the contracts remarked on the very poor quality of carbolic powder hitherto supplied to the Municipality. Last year, during the plague, the so-called carbolic powder was found to be nothing more than sawdust and chalk, the percentage of acid being very small. With the progress and spread of plague in all parts of the city and suburbs, prophylactic remedies are greatly sought after. A correspondent of the leading paper in Bombay vouches that the following recipe for pills has given splendid results in a large native State:—

Acid. carbolic.	...	...	...	gr. ½
Quinine	...	...	...	gr. ij.
Pulv. ipecac.	...	...	...	gr. ½
Camphor.	...	...	...	gr. ¼

In one pill. One to be taken twice daily.

CALCIUM CARBIDE IN INDIA.—India affords a splendid ground for the sale of calcium carbide, inasmuch as there are no native producers of the article, and acetylene gas is in great favour, while its developments are limitless. At the present time calcium carbide is being sold retail at less than 6d. per lb. The *Scientific American* remarks that considering the English company, which has a large export trade with India, cannot retail the article at less than 1s. per lb., it is evident that the country is being exploited by some producers, who are desirous of encouraging the employment of acetylene gas by flooding the market with immense quantities of carbide.

INTOXICATING DRUGS.—With regard to the coming auction of the right for the wholesale supply and of the retailing of ganja, charas, bhang, and other intoxicating drugs prepared from the hemp-plant a notification has been issued by the Mysore authorities. It states that only one licence for wholesale vend, to be located at Mercara or Fraserpet, will be granted in the province of Coorg. The number of retail shops is restricted to six—viz., one each at Mercara, Viranjendrapet, Gonicopal, Fraserpet, Somvarpet, and Sanivarsante. The prices of the drugs will be at the rate of 1a. per tola. The latest returns of the Excise Department show an increased consumption of ganja, and the area of the cultivation of hemp is also extending throughout the province.

Pharmaceutical Society of Great Britain.

COUNCIL-MEETING.

ALL the members of the Council were present at the meeting on Wednesday with the exception of Mr. Storrar. In considering the Benevolent Fund administration it was announced that two annuitants had died since last meeting. The regulations for the Waterall legacy were approved: these are drawn up on similar lines to those which govern the Benevolent Fund. The sixtieth annual general meeting of the members of the Society was fixed for May 22. The draft Pharmacy Bill, enlarged to fifteen clauses, was approved by the Council. Clauses or additions had been made to meet the decisions in recent law cases. Copies of the Bill are to be sent to the Privy Council, who are to be asked to grant an interview to a deputation of the Council. The Lord Chancellor is also to be asked for his support. Dr. Symes wished to know if a statement could not be prepared to send out with the Bill, but no answer was publicly made to this question as the Council went into committee. Mr. Martindale explained the principles which had guided the Council in preparing the draft. Mr. Glyn-Jones, referring to recent law cases, wished it to be understood that the provisions made in the Bill do not necessarily indicate that the Council regards the decisions as final. Mr. Taylor explained his position as a choice between the Bill or inactivity, and Mr. Atkins confessed that although he had made some concession of principle he still maintained that the public interest would be better served by the reservation of pharmacy to individuals. The by-laws now before the Privy Council are to be withdrawn for reconsideration as a result of the Strachan case.

The monthly meeting of the Council was held on March 6 at 16 Bloomsbury Square, W.C. There were present:—The President (Mr. G. T. W. Newsholme), the Vice-President (Mr. C. B. Allen), the Treasurer (Mr. S. R. Atkins), and Messrs. Carteighe, Cooper, Corder, Cross, Glyn-Jones, Harrington, Harrison, Hills, Johnston, Martindale, Park, Savory, Southall, Symes, Taylor, Wootton, and Young.

The minutes of the last Council-meeting were read, as also those of the adjourned meeting. At the latter the Council in committee considered the alterations to the Bill advised by the solicitor, who was present to explain them.

ELECTIONS AND RESTORATIONS.

Several persons (number not stated) were elected as members or student-associates of the Society; six persons were restored to the Society, and a like number restored to the register of chemists and druggists.

FINANCE.

The report of the Finance Committee showed balances on the

	£	s.	d.
General Fund account ...	3,260	4	6
Benevolent Fund account ...	772	13	0
Orphan Fund account ...	300	2	3

—and submitted for payment 1,463*l.* 9*s.*, made up of 748*l.* 2*s.* 6*d.* on behalf of the *Journal*, 77*l.* 19*s.* 7*d.* sundries, 311*l.* 0*s.* 10*d.* for the register, 76*l.* 6*s.* 1*d.* law expenses, and 250*l.* current expenses. The report was adopted.

The TREASURER was also authorised to pay the Bell Scholars 15*l.* each, the second moiety of their scholarships.

BENEVOLENCE.

The report of the Benevolent Fund Committee was considered in committee, after which

The VICE-PRESIDENT, in moving the adoption of the report, said two annuitants—Mr. Bromfield and Mr. Suggate—had

died since the last meeting. Both these annuitants had reached a ripe old age, and enjoyed the annuity for a considerable number of years. Grants, three of 20*l.* and one of 13*l.*, were also made.

The report was adopted.

The VICE-PRESIDENT announced that regulations had been drawn up for administering the Waterall legacy on the lines of those which govern the Benevolent Fund. Applicants for the pension are to produce certificates as to moral character and age, when and where they were engaged in business, how their misfortunes arose, present means of existence, and how many persons depend on them. These certificates are to be signed by two members of the Society. Provision is also made for withholding the pension in cases where it has been obtained by fraud or misconduct, or where the recipient assigns his interest, or in case his position in life becomes such that he no longer needs the pension. Pensioners are also, in December of each year, to make a declaration of their circumstances, failing which the pension may be stopped.

Mr. HARRINGTON, in moving the adoption of the regulations, called attention to the scheme which governs the legacy.

The PRESIDENT said the conditions laid down in the legacy were somewhat difficult to deal with, but the Benevolent Fund Committee had drawn up regulations and forms which would make the matter easy. Although based on the Benevolent Fund regulations the Waterall legacy had to be kept separate from that fund.

Mr. CORDER: When will the first election take place?

The PRESIDENT: Next month.

The TREASURER said that during a recent visit to Nottingham, in conversation with chemists he found the regulations were acceptable. He expressed the wish that no applicant would be found in Nottingham, but perhaps, in the conditions under which business is carried on, that may be out of the question.

Mr. WOOTTON asked if persons receiving a pension from the Benevolent Fund could receive the Waterall pension.

The VICE-PRESIDENT: It is provided by the scheme that if a recipient is elected an annuitant on the Benevolent Fund he forthwith ceases to receive the Waterall pension.

THE LIBRARY, MUSEUM, AND HOUSE COMMITTEE

presented the usual report. It contained the statements of attendance at the libraries and museums, recommended that the Society subscribe fifty guineas towards fifty copies of a general index which the Editor of the *Journal* proposes to publish, and that a contract of 10*l.* a year for keeping the electric lamps, up to the number of 200, and fans in order be accepted. A recommendation was also made that a room be granted to the Secretary on the first floor of No. 16 for the better accommodation of the office staff.

The PRESIDENT said the general index would be to the end of the third series, and make the past volumes of the *Journal* more useful for reference. The increase of accommodation for the staff was very necessary.

The TREASURER: Has not the work of the staff increased?

The PRESIDENT: Yes.

The report was adopted.

The sixtieth annual general meeting of the Society was fixed for Wednesday, May 22, at noon precisely, and the Library Committee are to draw up the annual report.

THE PHARMACY BILL.

The report of the Law and Parliamentary committee stated that the committee had again considered the draft Pharmacy Bill, and recommended that it be adopted subject to certain alterations in the schedule. A copy was recommended to be forwarded to the Privy Council with a letter asking it to receive a deputation from the Pharmaceutical Council. Another copy is to be sent to the Lord Chancellor asking for his support.

The PRESIDENT moved that the report of the committee embodying the draft Pharmacy Bill be adopted. He said it did not need any fresh commendation from him, as he had spoken on the subject lately. The present Bill might be said to be the legal expression of the draft which was brought forward and published last December. It had been designed by the lawyers to render more effective the ideas

the Council had in view when drafting the Bill. Briefly, the points considered were: (1) Restriction of titles to qualified persons, (2) registration of shops, (3) registration of qualified persons conducting the shops, (4) provision for finding out the seller of poisons, and (5) the appointment of qualified directors by companies. It could not be said that they had hastily considered the Bill, which had had the mature thought of the Council and of the English and Scotch lawyers, and was an honest attempt to grapple with the difficulties the Council and the craft encounter. The Council had carefully considered suggestions made to it by chemists throughout the country, and when it found one thought to be at all suitable the suggestion had been adopted. Provision was made in the Bill for the regulation of the compounding of medical prescriptions in accordance with the views of the Lord Chancellor, but they had not thought it desirable to insist on annual registration. The recent judgment in the case of the Pharmaceutical Society *v.* White had caused them to add a few lines at the end of Clause 2 to meet such a difficulty, and Clause 3 had been designed to meet the case decided by Mr. Lane—it made clear the proper address of the seller of poisons. Clause 5 was a new one which had been found to be an administrative necessity. The President said he had on several occasions stated the Council had made up its mind as to what it wanted, and was not prepared to go beyond certain limits. The Bill before the Council was practically the original Bill with the exception of alterations in the clauses, but the principle was the same. One of the greatest difficulties the Council had had to contend with had been to make the Bill applicable to Scotch law. In England it had been fairly easy to carry out the Pharmacy Act, 1868, but in Scotland experienced difficulty was found in getting penalties against offenders. The present Bill met these difficulties, not only in regard to the seller of a poison, but in regard to the position of a company or partnership in Scotland. There was an idea, he said, that a company or partnership in Scotland would not be included by the provisions of the first draft Bill, but the solicitors, Mr. Flux and Mr. Morison, had put the matter into such a form as to meet the case of companies and partnerships throughout Great Britain. The Council had spent a great deal of time in discussing the Bill, and each member had done his best to promote a Bill which would be for the benefit of the public and chemists. It had frequently been said that there had been too much compromise over the matter, but his answer to that was that everything they did must be a compromise. If they were not willing to meet each other, what would be the good of a Council? He admitted that he himself had had to give up some of his ideas, and so had every one of his colleagues, but their aim throughout had been to do the very best they could for the public and themselves. The Bill was an honest endeavour to relieve the present awkward conditions under which they carried on business, and if the Bill passed, their position would be distinctly improved and the public protected. The Bill would require

GREAT AND HEROIC EFFORT

to get it put on the statute-book. It was necessary also that members of Parliament who tackled the Bill should have some technical knowledge so as to be able to understand it, and thus influence fellow-members of Parliament. Each member of Council was willing to do his utmost to promote the passing of the Bill, but it would be necessary for every chemist on the register to do his very best to inform his member of Parliament exactly as to the position of affairs. He asked chemists to take the Bill in a fair spirit as an honest endeavour to improve the condition of affairs. Members of Council were almost powerless, unless they were supported by the great body of chemists in this country. A great deal of work could be done by members of the craft in dealing with their members of Parliament, and by the better organisation which had recently come into force they might be able to do much more than formerly if divisional secretaries called the members of the Society together to discuss the Bill. They should put into the Bill a large amount of enthusiasm. It was not the least bit of good saying that they approved of the Bill: they must let the public know of its existence, and that it was for the good of the public as much as for the chemist

himself. It was intended to reprint the Bill and send copies to the Divisional Secretaries, with the intimation that they could have a further supply for use at any meetings they might call. (Applause.)

The VICE-PRESIDENT said, after the amount of work that had been expended on the Bill he was glad to have reached the present stage. He hoped everyone would endeavour to put "back" into it and give it his enthusiastic support. As the Council was responsible for providing the Bill, he would only point out that it was a Bill chemists could put into the hands of anyone outside, and be able to show that there was no selfish motive in it. It was not drawn up largely for the benefit of the chemist, but for the public welfare. He felt that if in the future every chemist would put his energy into the Bill they might soon see it on the statute-book.

Dr. SYMES asked whether it was intended to draft a letter from the office to send to members showing in a concise manner the reasons for the Bill and its various clauses. In this manner they would get a uniform attack on members of Parliament, otherwise, as ideas on the question differed somewhat in each chemist, there might be a little confusion. He thought a concise statement of the case would avoid such confusion.

THE COUNCIL THEN WENT INTO COMMITTEE.

On resuming, Mr. MARTINDALE said he would like to put the case as to how or why the Bill had arisen. It was thought the 1868 Act gave them certain privileges, but the highest Courts of law in the land had shown that there was a flaw in it. The consequence had been that they found they had not got what they expected from the Act. During the last twenty years vested rights had arisen, and they might as well cry for the moon as expect to extinguish these vested rights. The Law Lords said limited companies were outside the Act. In drafting the new Bill they had included three things. The first was the protection of titles, and second the registration of chemists' shops. The Bill was, in fact, a battle between qualified pharmacists on the one hand and capital and quackery on the other. Pharmacists exercised a certain amount of professional calling, as in selling poisons he had to use judgment and give a decision which was not that of a mere hireling. In the case of a capitalist, he looked merely for a big return on his capital, and they could not expect a similar decision from the capitalist's hireling. The registration of shops was not merely for those owned by limited liability companies, but such of their own men as had branch shops. Mr. Ritchie pointed this out very plainly last year. The third thing they had tried to embody in the Bill was the restriction of companies dealing in poisons. They might call it regulation if they liked, but without restriction there was hardly any necessity for the Bill. They did not want to make free trade in poison. He approved of Clause 7, which required a qualified director, as it was the only means they could devise of checking the inception of bogus companies. He referred to such cases as where a man failed at the examinations and then, with six others, formed a company and drove a coach and horses through the Act. Without this clause they would not be able to check such companies, and the Bill would be worth nothing. He looked upon it as the most valuable clause in the whole Bill. They had spent much labour over the Bill, and had done their best to bring companies into line with the Pharmacy Act, 1868, which they had to acknowledge was hardly up to the needs of to-day, and therefore required amending. In asking for the support of members of Parliament they were not asking their support to a Bill which was impossible. Some of their North Country members seemed to be asking for the moon. If the Council could only get the united support of all chemists they might get the Bill passed and better their positions.

Mr. TAYLOR said he was in doubt as to giving a silent vote, but after the remarks of Mr. Martindale he decided that he ought not to vote without explaining his position. It would be bad taste at this point to emphasise any points that did not meet with his convictions, but he frankly admitted he had had to turn his back on some of them, and that the Bill did not meet all he wanted. With him it was a matter of choice between this Bill and inactivity, and he therefore intended to vote for the Bill.

Mr. GLYN-JONES felt there was no need to go into the details of the Bill, as that had been so ably done by the President, but he wished to refer to the two alterations which had been made in the Bill in view of the recent decisions of the Court of Appeal and Mr. Lane. Whilst no one had a right to assume that the Council accepted these decisions as final it was possible that some persons might consider the Council had accepted them as binding. In the case of the Pharmaceutical Society *v.* White nothing had been decided except to confirm the county court judgment that no sale had taken place. He did not want it to go forth that the Council thought that sort of thing was legal, but in view of future eventualities it had thought it well to include certain clauses in the Bill. The general principle which had guided them in the Bill was well found in the words of the preamble of the 1868 Act. There was nothing in the Bill which could not be accepted in the interests of the public. The Council considered the 1868 Act ineffective as it does not provide the protection to the public intended, but he did not deny that the interests of chemists as chemists were wrapped up in the Bill. That was only because men had to possess a competent knowledge of the business, and the Legislature induced men to get such knowledge by holding out advantages. There was nothing in the Bill about capitalists, as he did not think the Council had any right to take anything into its consideration except what concerned the public safety. The trade owed it to the Council to fairly consider the Bill, and every member of the trade should treat it as an individual matter, as without the support of the trade the Bill stood little chance of getting through Parliament.

The TREASURER said every one of the councillors has borne very patiently the long process of evolution of the Bill. He hoped it was for the last time of asking, and that the banns will soon be published, as he must confess to a certain weariness of the subject. He had been often chaffed about his spirit of concession, and had had to make not only concession of details, but of principles. He still felt, however, when they heard so much about public interest, that public interest was best conserved by reserving pharmacy to the individual. He was shortly to address chemists in his neighbourhood, and wanted to create enthusiasm for the Bill, but confessed there had been, so far, no small difficulty in doing it. Unless they could create enthusiasm, there was very small chance of getting the Bill passed. The vested interests in the Houses of Parliament are so enormous that they could scarcely know their quantity until they try them. If they could not say to M.P.'s "We are practically united," then good-bye to any chance of success. He was prepared to help his colleagues in any way he could to make the Bill law. "It won't bring the millennium, carry it how you will. All legislation in this country results in a feeling of disappointment, but we shall have done our best, and if we fail it will be a very honourable failure."

The PRESIDENT said there was nothing to reply to in the previous speakers' remarks, and put the resolution that the report be adopted, which was done unanimously.

DIVISIONAL SECRETARIES.

The following appointments of divisional secretaries were made:—

Cardiff.—Mr. W. J. Sanders.

Hornsey.—Mr. J. H. Frost.

Carnarvon Boroughs.—Mr. Owen Jones.

Carnarvon, North.—Mr. R. B. Roberts.

The PRESIDENT said he recently had the opportunity of speaking with Mr. Sanders, and found him a most suitable divisional secretary. He had no doubt that the appointment would result in great good to the craft in South Wales.

CORRESPONDENCE.

Communications were received from the Colonial Office, enclosing a copy of the New Zealand Pharmacy Act amending the 1871 Act.

From the Midland Pharmaceutical Association, approving of a registration-fee for shops.

From the Blackpool Association, expressing approval of the draft Bill, but suggesting amendment of Clause 5.

From the Wolverhampton Association, supporting the draft Bill.

From the Dewsbury Association, approving of the Bill, but suggesting a compulsory annual registration;

From the Cardiff Association, approving of the Bill, and suggesting compulsory registration at a 5s. fee, to include membership of the Society;

From the Local Government Board, acknowledging the receipt of the Council's letter on bottles for carbolic acid, and suggesting that a regulation be made under the Pharmacy Act that all poisons be put up in special bottles, the same as is required for liniments and other external applications.

From the Nottingham Medical and Chirurgical Society, calling attention to the use of diachylon internally, and suggesting that it be added to the poison schedule.

The SECRETARY said he had never heard of diachylon being used internally, but, on making inquiries, found it was used as an abortifacient in the Nottingham district.

The last letter was referred to the General Purposes Committee, the other recommendations to the Law and Parliamentary Committee.

THE BY-LAWS.

The portion of the General Purposes Committee's report which was made public is a recommendation that in view of the decision in the Strachan case the by-laws be withdrawn from the Privy Council Office for re-consideration.

This was the end of the public business.

Draft of a Bill

To further Regulate the Sale of Poisons; also to Regulate the Compounding of Medical Prescriptions, and to Alter and Amend the Pharmacy Acts 1852 and 1868.

BE IT ENACTED by the King's Most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal and Commons in this present Parliament assembled and by authority of the same as follows:—

1 In this Act "the Society" shall mean "the Pharmaceutical Society of Great Britain" "registered person" shall mean pharmaceutical chemist or chemist and druggist "poison" shall mean a poison within the meaning of the Pharmacy Act 1868 "Registrar" shall mean the Registrar of the Society

2 From and after the 31st day of December 1901 it shall be unlawful for any person or any company firm co-partnership or body of persons to keep any open shop or shops for the retailing dispensing or compounding of poisons or of medical prescriptions unless each shop shall be *bonâ fide* conducted by a registered person or to permit or suffer in such shop any poison to be retailed or any medical prescription to be retailed dispensed or compounded otherwise than by or under the supervision of a registered person also it shall be unlawful for any person or any company firm co-partnership or body of persons to keep any such shop unless the address of the shop shall have been registered upon the register of shops to be kept under this Act and the name and address of the registered person to be in the *bonâ fide* conduct of the shop shall have been registered upon the register of persons in the *bonâ fide* conduct of shops to be kept under this Act and also it shall be unlawful for any person or for any company firm co-partnership or body of persons to sell or to negotiate or participate in the sale by retail of any poison at or upon any place other than an open shop registered upon the said register of shops

3 The address of the registered shop whereat a sale of poison takes place shall be the address of the seller for the purpose of the labelling required by Section 17 of the Pharmacy Act 1868

4 It shall be the duty of the Registrar to make and keep a register of shops and also a register of persons to be in the *bonâ fide* conduct of shops in accordance with the provisions of this Act and to make such alterations in the said registers as shall from time to time become necessary No entry shall be made in either of the said registers until receipt by the Registrar of a request in writing for the purpose by an owner of the shop made in a form in that behalf appearing in the schedule to this Act The Council of the Society may make regulations under which either of

the several entries in the said registers may be inspected or may be removed therefrom and under which a certified extract of any entry may be obtained There shall be payable to the Society in respect of each request aforesaid and also in respect of each certified extract aforesaid a fee of two shillings and sixpence and also in respect of each inspection of an entry a fee of one shilling Any certified extract as aforesaid under the hand of the Registrar shall without proof as to his signature be evidence in all courts and before all justices of the peace and others of the matters thereby certified

5 It shall be unlawful for any place other than a shop or building separately rated to the poor to be entered or continued on the said register of shops

6 It shall be unlawful for one and the same registered person to be at one and the same time entered upon the said register of persons in the *bonâ fide* conduct of shops in respect of more than one shop provided always that any entry upon the register of persons in the *bonâ fide* conduct of shops may upon request in writing signed by the person on whose application such entry was made or the person whose name is registered and delivered to the Registrar become removed therefrom

7 It shall be unlawful for any company incorporated under the Acts in force regulating joint stock companies to retail dispense or compound poisons or medical prescriptions unless the business of such company shall be managed by one or more director or directors who or all of whom shall be registered persons not directors of any other company carrying on the like business and who shall exercise all such powers of the company as are not by the Companies Acts required to be exercised by the company in general meeting

8 The Registrar may from time to time either by letter signed by him as Registrar or verbally by himself or by a person authorised in writing by him for the purpose make such inquiries as he shall think fit of any person retailing dispensing or compounding poisons or medical prescriptions at or of any owner of a registered shop and it shall be unlawful for such person or owner to refuse or neglect to furnish by writing signed by him if so required the information inquired for

9 Any Registrar who shall wilfully make or cause to be made any falsification in any matter relating to the said Registers and any person who shall wilfully procure or attempt to procure any registration under this Act by making or producing or causing to be made or produced any false or fraudulent representation or declaration either verbally or in writing and any person aiding or assisting him therein shall be deemed guilty of a misdemeanour in England and in Scotland of a crime or offence punishable by fine or imprisonment and shall on conviction thereof be sentenced to be imprisoned for any term not exceeding twelve months.

10 The Society shall have power by hy-laws duly confirmed to authorise the persons from time to time appointed by the Council of the Society to conduct examinations to require from persons who shall present themselves for any examination evidence of their having received systematic training in some university or other place for learning approved by the Council of the Society and to divide any examination into two or more portions with or without an interval of time between the same portions and to authorise the said Council to accept in lieu of certificates of the said examiners such certificates of competent skill and knowledge granted by legally constituted pharmaceutical authorities in the United Kingdom or in any colony or possession thereof as may to the said Council seem fitting provided always that no certificate shall be accepted which has been granted to the holder without examination or which he has obtained without having first received such systematic training as aforesaid and to prescribe the fees to be payable by persons tendering for acceptance the certificates aforesaid of competent skill and knowledge

11 Any act or omission which would be an offence under the Pharmacy Act 1852 or the Pharmacy Act 1868 if committed by a person except the offence of selling or keeping open shop for the retailing dispensing or compounding of poisons by a person not registered under the said Acts shall be an offence if committed by any company firm co-partnership or body of persons and any company firm co-partnership

or body of persons committing any such offence shall be liable to the penalty by the said Acts provided for the same

12 For every offence under this Act the offender shall be liable to pay a penalty or sum of five pounds sterling

13 Except where in this Act it is otherwise provided any penalties incurred under or by virtue of any of the provisions of this Act or the Pharmacy Act 1852 or the Pharmacy Act 1868 may be sued for recovered and dealt with in the manner provided by the Pharmacy Act 1852 for recovery of penalties under that Act without prejudice however to the provisions of the Summary Jurisdiction (Scotland) Acts 1864 and 1881 and the Criminal Procedure (Scotland) Act 1887 with reference to proceedings thereunder taken in Scotland for any contravention of this or either of the other before-mentioned Pharmacy Acts

14 This Act shall not extend to Ireland

15 This Act may be cited as the Pharmacy Act 1901

SCHEDULE—PART 1

Register of Open Shops

Address of Open Shop	PARTICULARS OF OWNERSHIP		
	In the case of sole Ownership	In the case of two or more Partners	In the case of a Company
	Name and Address of Owner	Name and Address of each Partner	Name of Company and Name and Address of each person acting as a Director

PART 2

Register of Registered Persons in or to be in the *bonâ-fide* Conduct of Open Shops

Address of Registered Open Shop	Name and Address of Owner Signing	Name and Address of the Registered Person in or to be in the <i>bonâ-fide</i> conduct of the Shop

PART 3

Form of Application for Registration of an Open Shop

Address of Open Shop	PARTICULARS OF OWNERSHIP		
	In the case of sole Ownership	In the case of two or more Partners	In the case of a Company
	Name and Address of Owner	Name and Address of each Partner	Name of Company and Name and Address of each person acting as a Director

I make application for registration of the above-mentioned open shop

Dated this.....day of.....19...

Signature of owner.....

PART 4

Form of Application for Registration of a Registered Person in or to be in the *bonâ-fide* Conduct of a Registered Shop

Address of the Open Shop	Name and Address of the Registered Person in or to be in the <i>bonâ-fide</i> conduct of the Shop	Name of the Owner making Application

I make application for registration of the above-mentioned registered person

Dated this.....day of.....19...

Signature of owner.....

Trade Notes.

MESSRS. J. H. SMITH & Co., Newark (the "Flyodoomo" firm) are placing upon the market a speciality, in the shape of a mushroom-pickle. This is their first season with the pickle, but Mr. Smith has been a maker of mushroom-ketchup since 1896. The new pickle is already inducing the popular taste in its direction.

SPRATTS PATENT (LIMITED) send us their new illustrated catalogue of game and sporting appliances. It comprises coops and other requisites for the rearing-field, traps, alarm guns, cooking stoves, and the many various requirements for general sporting estates. The firm intimate that they will forward a copy of the catalogue, which is handy in form and extremely well printed, post free to any of our readers on application.

EUREKA ALBION ELASTIC BANDAGE.—Under this name Mr. Vincent Wood, of Albion Place, Blackfriars Bridge, has introduced a surgical bandage made of elastic web, with pleated surface, which becomes smooth when stretched, while retaining sufficient grip to prevent one layer of the bandage from slipping over the other. It gives excellent support to limbs affected with varicose veins, and should be a saleable line during the sporting season.

THE VOGELER COMPANY.—We observe, from an American contemporary, that the trustees of this company have sold, subject to ratification by the Courts, the goodwill, patents, and trade-marks of the company for \$200,000 to Mr. Richard Jones Drinkwater, of London. It is provided in the agreement of sale that Mr. Drinkwater may use the name of "Charles A. Vogeler Company" in carrying on the business, provided he employ a prefix to show that it is not being carried on by the Charles A. Vogeler Company.

"TABLOID" PILOCARPINE.—Messrs. Burroughs, Wellcome & Co., Snow Hill Buildings, E.C., in whose laboratories the most modern work on the jaborandi alkaloids has been done, have sent us samples of "tabloid" pilocarpine nitrate, $\frac{1}{4}$ gr. and $\frac{1}{10}$ gr. It has been shown that the physiological activity of jaborandi-preparations varies very much, so that the tabloid pilocarpine of proved efficacy should find favour with the medical profession. The tabloid-preparation is soluble in water, and is issued in bottles of twenty-five.

COLD-CREAM AND LIQ. IODI.—Messrs. Waller, Malvine & Co., manufacturing chemists, 12 Castle Street, W., submit two special pharmaceuticals which they are making. The one is a well-made cold-cream, of pearly appearance and nice perfume; the other is a non-staining iodine—liquor iodi. This is a green oily solution, about twice the strength in iodine of the B.P. tincture. It is said to be readily absorbed by the skin, and to be non-irritating. The firm will send samples to any of our subscribers on application.

A CHEAP INHALER.—The latest, and surely the cheapest line in inhalers has recently been introduced by Messrs. Potter & Clarke, Artillery Lane, E. It is named the "Germicide Inhaler," and retails for 6d. The inhaler is simply a piece of glass tubing rounded at one end to fit the nostril and shaped for the lips at the other end. Inside is a piece of tow or cotton-wool on which the medicament to be inhaled is dropped, and the apparatus is ready for use. The inhaler with a supply of medicament is packed in a nice cardboard slide box, and the whole nicely labelled.

FOR DISPLAYING OR KEEPING TOOTH-BRUSHES, Messrs. Lynch & Co. (Limited), Aldersgate Street, E.C., are offering in their advertisement this week a handsome cabinet, containing three drawers and a showcard-top, which they present free to buyers of an assorted gross of their brushes, while those who purchase a gross of the firm's "antiseptic hygienic tooth-brushes" get a show-case with glass cover (bell-shaped), in which a selection of the brushes can be displayed on the counter without fear of soiling. It will be noted that the name and address of the retailer are also stamped on the brushes.

MAGGI'S TONIC BOUILLON.—Messrs. Cosenza & Co., 95 Wigmore Street, Cavendish Square, W., have introduced a new form of Maggi's bouillon, in which the agreeable and stimulating properties of that well-known *consommé* are

combined with the tonic effects of a preparation of iron, which, though present in small quantity, suffices to add to the beneficial properties of the bouillon, especially as a nutritive agent for those recovering from influenza. The bouillon is put up in gelatin capsules, each of which contains a cylinder of solid extract sufficient to make 13 oz. of a clear and palatable soup. It dissolves quickly, and affords a very tasty article, and we can speak from personal knowledge of its sustaining influence.

VASOGEN.—Mr. E. J. Reid, 11 Danedin House, Basinghall Street, E.C., writing in reference to our note respecting vasogen, says that he particularly wishes to emphasise the fact that the pure vasogen is not sold as a liquid, but as an ointment-basis which has the appearance of petroleum-jelly, although it is quite different in composition. The manufacturers of vasogen supply, however, medicated liquid vasogens in which iodine, ichthyol, and other drugs are combined by a special process. These are the only liquid forms in which vasogen is supplied. Mr. Reid also asks us to make it quite clear that he does not say that any chemists have purposely dispensed an imitation of vasogen, but that, from a misunderstanding, mistakes have occurred owing to the supposition that pure unmedicated vasogen also exists in liquid form, while, as a matter of fact, it does not.

"DAK" BIRDLIME is a special make of birdlime for the colonial market which is sold by Messrs. Kay Brothers (Limited), Stockport. The sample we have examined is opaque and drab in colour. It has the elasticity of india-rubber, and the tenacity is not injuriously affected by a moderate amount of heat. "Dak" is also cheaper than "Jap," the variety of birdlime which hitherto fulfilled the climatic conditions of the colonies. The use of birdlime for catching rats and mice—a purpose for which it is being used in India and Cape Colony—requires a tenacious birdlime such as "Dak." The "Vampire" spiral fly-catcher, which has been noticed before in the *C. & D.*, is now made with a special gum for colonial use, and our subscribers "over the sea" should specify on their indents that it is this kind they require. Messrs. Kay Brothers (Limited) inform us they will be pleased to send samples of these articles to interested buyers.

THE CROWN PERFUMERY COMPANY, 112 and 113 Fore Street, E.C., inform us that they have appointed Mr. S. F. Goss general manager of the company, and henceforth he will have the sole control both of the business in this country and of all the foreign branches and agencies. Mr. Goss's long association with pharmacy, and the knowledge which he has obtained of West-end trade during his association with Messrs. S. F. Goss (Limited), are a good index of his ability to cope with the business problems that are familiar to the drug-trade. The Crown Perfumery Company, whose management he has taken over, has been established more than a quarter of a century, and during that time has extended its interests very widely in a quiet way, for it has at present branches and agencies in Paris, Berlin, Brussels, St. Petersburg, Vienna, Madrid, and other European cities; also in the United States, Canada, Mexico, South America, India, China, Australia, and South African Colonies. By way of introduction, Mr. Goss has produced a new soap under the name "Savon Vanda." The soap is, in point of quality, artistic finish, and perfume, an excellent line, and it will yield the retailer, who buys on the best terms and sells at the minimum rates, a profit of 40 per cent. A box of the soap is intended to represent eighteen pennyworth, and it is got up elegantly, the wrappers and boxes being in purple leatherette, with gold decoration. The style of the box is, we understand, illustrated in the Crown Perfumery Company's advertisement in this week's issue. In future the company's specialities are to be supplied on a fixed-price and anti-cutting basis.

MOND GAS, which is so referred to just now, consists of 42 per cent. water-gas with 42 per cent. nitrogen and 16 per cent. carbon dioxide, and its calorific power is about 150 units per cubic foot; whereas coal-gas has only 0.7 per cent. CO₂, 0.5 per cent. N, and a thermal efficiency of 680 units. For every ton of fuel gasified 2.5 tons of steam are required.

Personalities.

MR. ADPAR JONES, of Messrs. Idris & Co., has been re-elected President of the London Mineral Water Bottle Exchange and Protection Association.

A GERMAN play, "Getzen," by Mr. H. Blau (London agent for Hoff's Malt-extract), was produced at the German Theatre in London last week, and aroused considerable interest.

MR. F. WINTLE, traveller for Messrs. F. Schutze & Co., of 39 Southwark Street, S.E., for the West of England and Ireland, has been confined to his home by sickness, but hopes to resume his duties in a week or two.

MR. ROBERT STEELE, F.S.A., F.C.S., assistant secretary of the Chemical Society, delivered a lecture at the Society of Arts on Tuesday evening on "Early Playing-cards and their Decoration." This is one of the many antiquarian subjects in which Mr. Steele is expert, and recently he has elicited some notable facts regarding the origin of playing-cards which had not been known hitherto.

MR. COUNCILLOR F. BIRD, Chairman of the Coventry School Board, and one of the oldest-established chemists in the city, entertained a number of friends on March 5, in celebration of the coming of age of his youngest son, Mr. Sidney Harold Bird. The party was held at the Union Street Assembly Room, which was prettily decorated for the occasion. Dancing was indulged in, refreshments were served, and Mr. Sidney Bird, who had received many presents, was the subject of general congratulation.

MR. GWILYM EVANS, pharmaceutical chemist, Llanelly and former member of the Pharmaceutical Council, has been interviewed by a representative of the *Western Mail* after a recent continental tour. Mr. Evans finds trade on the Continent considerably worse than it is with us, as merchants in Austria who had experienced difficulty in getting their goods from England during the recent boom had bought forward very freely, not anticipating delivery for some time. Orders, however, having been executed quickly there is a glut of goods in those countries. The South African war also has exercised a very material effect upon the central European money markets. Money is tight everywhere, and all traders are full of expectancy as to what the next few months may bring forth. Mr. Evans does not think we need fear competition from continental sources, but that America will be our most dangerous competitor. As to languages and their value in commerce our commercial training is sadly deficient and far behind that on the continent. Touching on trade combines, Mr. Evans says if all the works in one particular trade in Austria and Germany can be formed into a syndicate he does not see any serious difficulties in the way of combination of certain English industries, and gives as a local instance the tinplate trade.

FOR STUDENTS.—We have received from the Director of the University Correspondence College Press, Burlington House, Cambridge, the Matriculation Directory of the College for 1901. This useful annual (which is published at 1s. net) contains, besides the Calendar of the College, particulars regarding the various examinations in Arts and Sciences, a list of text-books, and the special subjects for forthcoming examinations. In the year 1900, 320 University Correspondence College students passed matriculation.

ESSEX WATER SUPPLY.—Dr. John C. Thresh, Medical Officer of Health for Essex, has prepared an exhaustive report on the Water Supply of the County. It is primarily for the use of the County Council, but contains information which will be generally appreciated by those who take an interest in rural and urban water supplies. The report extends to 168 pages, and is illustrated with a number of maps. The County has an area of nearly a million acres, and a population of over three quarters of a million. The water supplies are derived from surface collections, rivers, the sub-soil and deep wells, and in the book analytical particulars are given of each kind, and incidentally the connection between the health of the community and the quality of the water is expounded.

Business Changes.

Notices are inserted free in this section if properly authenticated.

MR. G. H. HOWELLS, chemist and druggist, is opening a business at 175 Caeran Road, Caeran-Maestag, Glam.

MR. H. S. DURBIN, pharmaceutical chemist, Wimbledon, is about to open a new pharmacy at Victoria Road, Surbiton.

MR. E. T. HAMER, chemist and druggist, has purchased the business lately carried on by Mr. J. Smith at 17 Bridge Road, Blundellsands, Liverpool.

MR. S. BRIGGS, chemist and druggist, of Crouch End and Bow, has taken the shop at 7 Gladstone Terrace, Wood Green, N., which he will shortly open as a branch.

MR. JOHN NOBLE, chemist and druggist, has purchased the business carried on for the last fifteen years by the late Mr. R. I. McDougall at 1 Gladstone Place Links, Leith.

MR. JOSEPH HEWITT, chemist and druggist, who has for some years been in business at 323 High Street, Chatham, is about to remove, and open new premises at 309 High Street, Chatham.

MR. C. H. WALKER, chemist and druggist, who after five years in Sydney, N.S.W., has returned to the old country, has purchased the business lately carried on by Mr. G. F. Tuck, at 288 White Post Lane, East Ham, E.

MR. W. R. WRIGHT, chemist and druggist, has disposed of his old-established business in New Street, Lancaster, to Messrs. Vince & Barker, Cheapside, Lancaster, who will carry on the business under the old style of Messrs. Bagnall & Wilcock, in addition to their present business in Cheapside. Mr. Wright, who succeeded Mr. R. Wilcock nearly four years ago, has entered into partnership with Messrs. Pain & Bayles, of Ipswich—a large wholesale and retail firm of mineral-water manufacturers. This change links two of the oldest businesses in Lancaster, the firm of Bagnall & Wilcock having been established in 1788 and that of Messrs. Vince & Barker in 1897.

Marriages.

CANAVAN—WILSON.—On February 26, at St. Saviour's Parish Church, Portadown, by the Rev. R. Thacker, Joseph Canavan, registered druggist, Portadown, to Esther Eleanor Georgina, youngest daughter of the late George Wilson, Richhill, co. Armagh.

MAIR—WATT.—On February 27, at the United Free Church, Calcutta, by the Rev. David Reid, M.A., B.D., assisted by the Rev. Mr. MacDonald, M.A., LL.D., Alexander Mair, eldest son of Mr. A. Mair, of Mickleholm, Lockerbie, to Margaret Honey Rennie, eldest daughter of Dr. George Watt, F.L.S., C.I.E., Reporter on Economic Products to the Government of India.

Deaths.

BROMFIELD.—At Exeter, on February 18, Mr. Charles Bromfield, chemist and druggist. Aged 80.

DAVENPORT.—On February 21, at 123 Heaton Lane, Mr. Henry Gulielmus Davenport, chemist and druggist. Aged 65. Mr. Davenport, who was one of the oldest of Heaton Lane tradesmen, had been in failing health for a long time.

DOWNING.—At Helston, on March 5, Mr. Alfred Downing, chemist and druggist. Aged 58. Mr. Downing had for the past few weeks been acting as *locum-tenens* for Mr. J. B. Martin, chemist, Helston, and died after a short illness. Mr. Downing was for many years an assistant with Mr. Goodwin, George Street, Plymouth.

Winter Session.

Notices of meetings to be held are inserted under "Coming Events." If meetings are not attended by reporters, secretaries of associations would oblige by communicating with the Editor.

Society of Chemical Industry.

LONDON SECTION.

A MEETING of this Section was held at Burlington House, Piccadilly, on March 4, Mr. Otto Hehner in the chair. There was a good attendance, many representatives of pharmacy being present. The CHAIRMAN intimated that nominations for the committee should be sent in before the April meeting. He also made a correction in regard to a remark made at a previous meeting, when, in referring to the death of Bunsen, he attributed to him the invention of the Bunsen pump. It has been pointed out that the pump in which a running stream of water or mercury is utilised for producing a vacuum is more properly attributed to Hermann Sprengel.

The discussion on the

OCCURRENCE AND DETECTION OF ARSENIC,

with special reference to the analytical side of the question, adjourned from February 18, was then continued.

The CHAIRMAN, opening the discussion, said every chemist who approached the question of estimating arsenic must have been struck with the fact that, in reference to beer, a new problem in the minute quantities of arsenic to be detected was presented them. One-hundredth of a grain in a gallon of beer is the largest quantity a recent witness before the Royal Commission spoke of as allowable. This is equivalent to $\frac{1}{10}$ milligramme per litre. A chemist is not only required to detect arsenic, but to state the quantity present. On this account it is necessary that analysts should dissociate themselves from such loose verbiage as to "traces" being present, and state the approximate quantity. There are two principles underlying the analytical methods in use—Reinsch's, in which the arsenic is deposited on copper in an acid solution; and Marsh's, which depends on the evolution of arsine when the arsenic-containing material is placed in a stream of hydrogen evolved by an acid acting on zinc or other metal. Reinsch's method is the one recommended by the Brewers' Committee in the late arsenic-poisoning epidemic; but it has the disadvantage that it in no way enables the chemist to arrive at the amount of arsenic present. Sulphites obscure the test, and tarnishing of the copper is no proof of arsenic. If cane-sugar or the products of invert sugar are present the hydrochloric acid is decomposed, and a carboniferous deposit results on the copper. Marsh's test—or more properly Berzelius's—has been modified by Gutzeit, so that the arsine impinging on a piece of filter-paper, moistened with silver nitrate or mercuric chloride, produces a black or yellow stain. There is, however, no means of saying definitely that the stain is due to arsenic, as several other substances might produce the discoloration. The most an analyst could say in a court of law was that he believed the stain to be due to arsenic. In regard to Marsh's test there is a great difference of opinion as to its sensitiveness; it may be the most delicate or the bluntest test, according to the way it is used. The action of caustic soda on aluminium produces a magnificent evolution of hydrogen, but if a small quantity of arsenic is added no arsine is evolved, as arsine is decomposed in the alkaline solution. The method, however, is excellent when large quantities of arsenic are present. The prime necessity in Marsh's test is to see that the zinc and hydrochloric acid are pure. It is usual to run a blank experiment, sometimes for as long as two or three hours—an exaggerated test which few chemicals will stand. When arsenic is added to the zinc and hydrochloric acid the arsine is given off in the twinkling of an eye, or at most two or three minutes, so that to keep a blank test going for two or three hours is misleading. He had found a quarter of an hour quite long enough for the test to run, proving this by adding 1 milligramme of arsenic to the solution and finding that practically the whole of the arsine

evolved in that time. When using Marsh's test the bottle should not be too large. To take a bottle of the capacity of two or three litres, when dealing with milligrammes, is like taking a steam-hammer to crack a nut. The speaker's practice is to use a flask of the capacity of 130 or 150 c.c. He prefers, also, hydrochloric acid to sulphuric acid, for the reason that it is a purer article, and, if arsenical, easily purified by vigorous boiling. Hydrochloric acid also is more sensitive than sulphuric acid. They should see that not only is the zinc pure but sensitive. Dr. Dyer, some years ago, when testing wall-papers for arsenic, noticed that some samples of zinc gave no reaction, and he (the speaker) has recently come across a sample of insensitive zinc. What caused the latter condition he is not certain, but he finds that if the rods of zinc are fused and granulated sensitiveness is brought about at once. It is useless for manufacturers to guarantee zinc free from arsenic when it will not show it when present. It had been stated in that room by analysts that they use a fairly blunt method, but he held that an analyst's business is to find out what is there and then draw the line between important and unimportant quantities. If Marsh's test is worked properly it is easy to detect 1 milligramme in 1,000 c.c.; in practice he uses 10 c.c. of arsenical material, and can detect 0.000001 of arsenic in it. It is necessary, in preparing a series of standard mirrors for quantitative comparison, to use accurately gauged tubes and also to hermetically close the tubes, as the mirrors perceptibly fade in the presence of air. Taking, then, a 150-c.c. flask, he closes it with a cork, being careful to test the cork first for arsenic, and fits into it the tube. The tube has provision for lead-acetate paper and calcium chloride, over which the gas passes; there is also inserted a plug of cotton-wool to prevent explosions. The construction where the arsenic mirror is formed is 0.092 inch. Five or ten grammes of zinc is used, water added, and then hydrochloric acid run in. The evolved gas is lighted and allowed to burn for a quarter of an hour. The flame changes from a pointed to a rounded shape. Ten cubic centimetres of beer or 10 grammes of malt is then added, and the evolution continued for another quarter of an hour. The mirror produced is then compared with the standard mirrors, and the quantity present in the sample deduced. It is advisable to make sure that the mirror is due to arsenic, the simplest way being to fuse both ends of the mirror-tube and then combust the mirror into arsenious acid by holding the tube with a pair of hot pincers in a Bunsen flame till red-hot. A very small number of the beautiful crystals of arsenious acid will be produced, to detect which it is quite unnecessary to use a microscope. Marsh's test, if not exaggerated, answers every requirement, and by its aid in half an hour an analyst can with certainty say if arsenic is present or not in the substance being tested. In answer to a question by Dr. Thorne, the Chairman said he finds the addition of platinum chloride makes insensitive zinc worse, and is not sure that selenium does not make for insensitiveness.

Mr. LING then read a paper which he had prepared on the subject, the main points of which, however, had been recapitulated by the Chairman in his opening speech. The two points Mr. Ling dealt with were—(1) Where should the limit be fixed? and (2) What method should the analyst use? He suggested that a limit of 0.004 gr. per gal. for liquids and 0.001 gr. per lb. for solids is sufficient. With regard to the tests, his experience has proved that Marsh's test is the best. It is much more delicate than Reinsch's. While with the latter it is possible to detect 0.01 gr. in a gallon, with Marsh's test 0.001 gr. can easily be ascertained. Another argument in favour of the Marsh method is that by its means quantitative results can be obtained. The method used by him is similar to that described by Mr. Hehner, but he prefers to run his blank for half an hour instead of only fifteen minutes. By this means he has obtained results which show that when proper reagents are used the test is one of extreme delicacy. He passed round tubes, mounted on cards, showing the results of determinations he has made proving the presence of 0.01 gr. As_2O_3 per gal. in beer. He confirms the statement of the Chairman that with different zincs different degrees of delicacy are obtained. During the fermentation of worts with sulphites H_2S is evolved, but if allowed to remain for a few days he found that the beer contains the same

amount of arsenic as before, showing that no arsenic is given off in the evolution of H_2S . Some years ago it was said that a micro-organism had been isolated from arsenical wall-paper which, combined with the arsenic, produced serious results. It was then stated that, when cultivated in a flask, these moulds gave off so poisonous a gas that it killed a mouse in a few minutes. He had conducted some experiments with worts and yeast, but in no case has he been able

to obtain a garlic odour or detect a trace of an arsenium compound. He, however, had not used pure cultures.

Mr. A. H. ALLEN said he never trusts the quantitative estimations by means of Marsh's test, but is, nevertheless, glad to learn how the test should be applied. He has been content to aim at a lower delicacy by a modification of Reinsch's test, and to detect $\frac{1}{100}$ gr. per gal. when working with 100 or 200 c.c. He boils the suspended article with hydrochloric acid and metallic copper, which must both be free from arsenic. First, however, he oxidises sulphites to sulphates by adding a little bromine-water, and, to get the arsenic into the arsenious condition, adds a little cuprous chloride. Successive portions of copper are used till no further discoloration of the copper takes place. The copper is then stripped of arsenic by means of hydrochloric acid and potassium chlorate, the arsenic distilled and titrated with

$\frac{200}{N}$ I. Marsh's test is preferable when testing invert sugar for arsenic, and insensitive zinc gave no trouble if granulated from the rod. The use of hydrochloric acid has been utterly condemned by some authorities, but he prefers it. As regards Gutzeit's test, his experience is limited, and, besides, a yellow stain is not so good as a mirror or crystals of arsenic.

Mr. C. T. Tyrer's apparatus for applying Gutzeit's test for arsenic. The hydrogen is generated in the flask E and passes up the tubes G and out by the holes C in the inverted tubes F. A little water is contained in the chambers H, and the lead or silver paper is placed below the funnel-shaped cap A. [The drawing is a third of the actual size.]

The CHAIRMAN: Is it not difficult to titrate so small a quantity as $\frac{1}{10}$ gr. of arsenic per gal.?

Mr. ALLEN: Not if a narrow burette is used, and a very weak iodine solution.

A MEMBER inquired whether, in speaking of arsenic, arsenicum or arsenious acid is meant?

The CHAIRMAN explained that in every case the white arsenious acid of the B.P. is generally understood when arsenic is referred to.

Mr. F. C. J. BIRD wanted to be enlightened as to some alleged fallacies of Marsh's test. He inquired whether sulphurous acid or the sulphites tended to prevent the deposition on the tube. For his own part he thinks the statement is slightly open to question. He had found the Gutzeit test exceedingly useful as a preliminary test. Of course it was open to certain objections, but that did not apply in every case. He had found that, particularly when testing coal-tar products, Gutzeit's test is exceedingly useful. He asked Mr. Hehner whether he found that small quan-

ties of organic matter present in the substance interfered with the reaction.

The CHAIRMAN said organic matter makes no difference; the froth presents the only difficulty. Unless the process is conducted slowly neither nitrates nor chlorides affect the test.

Mr. BAKER said it is no advantage to grind malt before testing it. If the whole malt is soaked in weak hydrochloric or sulphuric acid equally good results are obtained. Nearly all coke-dried malt contains arsenic; as little as $\frac{1}{10000}$ gr. in 10 grammes can be detected. Anthracite-dried malt gives no reaction for arsenic.

Dr. RUDOLPH MESSEL thought Pettenkofer's tin test as good as any. By using it all complications from impurities in the substances employed are obviated.

Mr. CHAPMAN said some time ago he put the claims of Reinsch's test for arsenic before the Society of Public Analysts, and since that time he had no reason to add anything to what he then said, save that its limit of sensitiveness had gone up enormously. Reinsch's he found to be the most generally serviceable and applicable test for a food chemist. By means of that test he has found quantities ranging from $\frac{1}{150}$ gr. to $\frac{1}{500}$ gr. of arsenic in beer. With regard to the extreme delicacy claimed for the Marsh test by some speakers, he thought that when only $\frac{1}{100000}$ gr. of arsenic could be detected in the article tested, he would not feel happy in certifying that article as impure. By testing to such an extreme limit the possibility of introducing error was emphasised, for, working with such minute quantities, it was absolutely necessary to proceed with considerable caution. He had used the method Mr. Allen had referred to, but he had not tried the iodine solution. The Gutzeit test he considered untrustworthy, because no definite results were obtained. The determination of minute quantities was all very well, but he never felt justified in going further than $\frac{1}{2}$ milligramme. With regard to testing malt, he could not confirm results mentioned by Mr. Baker. He preferred working on the whole malt instead of on the acid extract. In malt the arsenic is not often evenly distributed, and, in his opinion, Reinsch's in this case also is incomparably superior to Marsh's. He deprecated the idea of making the limit too low; when it came to finding $\frac{1}{50000}$ gr. they might, he thought, claim chemical purity.

Dr. ANGELL thought the different results obtained are due to operating in an arsenic zone; 170 samples of beer collected in Hampshire and Surrey yielded no arsenic reaction.

Mr. ALDOUS said what the brewers wanted was a standard to indicate the amount of arsenic beer should contain, but he trusted the analysts would not make that standard unreasonable. A standard to indicate the least possible amount of arsenic which it would be safe to have in beer would suit all purposes. Beer, he said, was one of the purest drinks obtainable, and is well able to stand the flash-light of the analyst's eye. Brewers are anxious to assist chemists and analysts in every way. So much is that the case that in breweries which he knows the washing-soda with which the floors are cleaned is tested in order to ensure that it is absolutely free from arsenic. Even although the line of prosecution were drawn, the brewer's elbow might occasionally be jogged by the public analyst before any prosecution took place in order that he might have a chance to make it certain that his beer was pure.

Dr. THORNE desired to add his testimony of the value of Marsh's test. He thinks it is exceedingly delicate and absolutely reliable. As far as the sensitiveness in regard to hydrochloric acid and sulphuric acid is concerned, his experience went to prove that the difference between them is very small. With really pure sulphuric acid, results are obtained exactly approximate to that used by hydrochloric acid. Mr. Ling, in his paper, expressed a wish, he believed, to fix the limit at $\frac{1}{1000}$ gr. to the pound. If he understood him correctly, and that was his intention, he desired to enter a protest against it, as there are very few chemists who are not constantly at work on the test who would not be able to say whether a substance contained $\frac{1}{1000}$ gr. of arsenic or not. Certainly fixing an extreme limit such as that, would be the means of bringing about continuous trouble.

Mr. LING said he only provisionally proposed the limits of 0.001 gr. of arsenic per lb. in solids, and 0.01 gr. per gal. in liquids.

Mr. ROBERTS said they did not seem to get any further with the argument than they were before. What he wants is the analysts to fix a standard or to agree upon a standard in this matter. A case had come under his notice a day or two before in which a sulphite salt had been submitted to seven eminent chemists, four of whom found it free from arsenic, while the other three found traces. That example shows that a standard for food products is an absolute necessity.

Mr. T. TYRER thought they were a little nearer as to the quantity of arsenic the public analysts want as a standard. Excessive delicacy in the test is not desired, nor should an analyst certify minute quantities. As a manufacturer of pharmaceutical and medical products, which are even of more account than beer—(question)—he would hesitate to certify a chemical as absolutely free from any trace of arsenic; there might be present a quantity expressed by the seventh place of decimals. What is required is for the analysts to fix a limit for manufactured products, and he was perfectly sure that manufacturers would meet the required degree of purity. The Royal Commission which is investigating the matter is made up of competent men representing industries and science, and he expects their results will be valuable. The conditions for conducting Marsh's test are laid down exactly in Roscoe and Schorlemmer's chemistry, where the size of the flask and quantity of zinc to be used are laid down minutely. He called attention to a series of arsenic mirrors he had prepared, which distinctly showed that the size of the flask caused a variation in intensity of the mirrors.

The CHAIRMAN said he had been disappointed with the two series of discussions which had taken place, as no new suggestion scarcely had been made. He had expected that the manufacturers would have come forward and have said, We will guarantee to make an article which is absolutely free from arsenic and which will answer these tests, but with one exception—that of Dr. Messel with regard to sulphuric acid—nothing of the kind had been done. He was disappointed that no help had been given by the manufacturers. He thought further that the fixing of a standard is really a question for medical men. It had been said that 0.08 gr. per gal. in beer was injurious. This had been confirmed by Dr. Tattersall before the Arsenic Commission, and the question for them was whether the standard is to be fixed at the 0.01 gr. or what it is to be. If they make the limit for beer 0.01 gr. a gal. then it will be very easy to arrive at the limit for glucose and the limit for sulphuric acid. The fixing of a limit, however, was none of their business. The limit ought to be fixed by the Royal Commission which is sitting for that purpose. The limit once laid down, a method could easily be found and he thought should be agreed to, for if there is one limit and twenty methods as a matter of consequence there would be twenty limits. Therefore he suggested that they should be ready with their method when the Royal Commission had finished their labours and had fixed a limit. They must remember, he said, that as long as there are a dozen analysts come together there will be thirteen opinions. He suggested that the Society should appoint a committee to look into the matter. On this committee the various interests of chemical industries should be represented, and he proposed that a committee consisting of Messrs. Ling, Chapman, Allen, Thorne, Hooper, Messel, Howard, Davis, and Estcourt be appointed.

This was agreed to, and on the suggestion of Mr. ROBERTS the name of Mr. Hehner was also added.

Torquay Chemists' Association.

A MEETING of chemists was held on February 28 at the Pavilion Hotel, Torquay, Messrs. Sloman, Knight, Ness, Waymouth, Newlyn, Quant, Rawling, Cutmore, Fowler, Bourne, Lee, and J. Young being present, several others sending apologies for non-attendance.

Mr. YOUNG was voted to the chair, and, in opening the meeting, stated that he had called the chemists of the town together to consider the question of forming a Chemists' Association for Torquay and district.

Mr. RAWLING, in seconding the proposition, said it was quite time they stirred themselves to protect the interests of the trade. He considered that the Pharmaceutical Society should endeavour to restrict more of the business to qualified

chemists, instead of allowing grocers and others to retail all drugs except a few scheduled poisons.

Mr. SLOMAN congratulated the meeting upon making such a successful start. There had never been a meeting of chemists in Torquay before, with the exception of one futile attempt over twenty years ago. He hoped this was but the forerunner of many successful gatherings where trade questions might be discussed and petty jealousies and misunderstandings removed.

Mr. QUANT suggested inviting the chemists of Paignton, Brixham, Dartmouth and Newton Abbot to their next meeting, with a view to their joining the Association.

The motion was carried unanimously, Mr. Young being appointed Hon. Secretary, and Mr. Bourne Hon. Treasurer.

The selection of President and Executive Committee was deferred until next meeting.

P.A.T.A. AND CUTTING.

The CHAIRMAN suggested that this question of cutting be discussed at their next meeting. Probably many would consider he ought to be the last person to introduce this question, he said, seeing that his name appeared upon the "black list" of the P.A.T.A., but he should have no difficulty in convincing the meeting that the present state of affairs was entirely due to the undiplomatic and dictatorial tactics pursued by the P.A.T.A. officials. It had also been suggested that they should meet the Grocers' Association to arrange prices of foods such as bovril.

Mr. KNIGHT strongly protested against approaching the Grocers' Association in any shape or form, considering that he, as a chemist, was compelled to sign an agreement to sell Scott's pills at 1s., whilst a grocer opposite openly sold the same pills at 10½d. per box, with the maker's numbered ticket attached thereto.

Mr. QUANT thought they should approach the question upon a broad and businesslike basis, considering that many proprietary articles were sold in equal proportions by both chemists and grocers.

Mr. WAYMOUTH wished to know if Mr. Young would be willing to fall into line with the Association in adopting P.A.T.A. prices.

Mr. YOUNG said he was always willing to sign mutual agreements, such as those issued by Beecham, Angier, and others, but with regard to patents generally he would not be undersold by anyone. He was compelled to reduce the price of Scott's pills from 1s. to 10½d. to meet competition, the consequence was that he received a threatening letter from the P.A.T.A. Secretary, and not replying by return of post to the same, his name was immediately placed upon the "black-list." He accepted the challenge, and had fought with his back to the wall for four years. He had asked the P.A.T.A. to bring the matter to a conclusion, and if they could carry out their threat to cut off his supplies, he would acknowledge defeat and forfeit a sum of money to the Association. He had no difficulty in obtaining these protected articles, but he was willing to "fall into line" for the sake of the prosperity of the Association. He wished it to be clearly understood, however, that his action was not to be construed into a victory for the P.A.T.A.

Mr. SLOMAN admired the fair-and-square manner in which Mr. Young had fought the P.A.T.A. He (Mr. Sloman) had told the representative of the P.A.T.A., when he called upon him for a subscription, that he would subscribe to the Association if they could stop Mr. Young selling Scott's pills at 10½d.

The subject then dropped.

It was decided that the Hon. Secretary write to Plymouth and other Associations, soliciting information relating to rules and co-operative buying, and the meeting was adjourned for a fortnight.

Chemists' Assistants' Association.

THE meeting on Thursday, February 23, was for the purpose of discussing

THE DRAFT PHARMACY BILL,

but so few members (seven) were present at the commencement of the proceedings that the President (Mr. J. A. Dewhurst) hesitated to proceed. At last, however, he

opened the discussion, and said that chemists were not much interested in the Bill, which was a fairly honest attempt to regulate the evils which were supposed to exist; even the members of the Pharmaceutical Council were not unitedly enthusiastic about it. Mr. Dewhurst then went rapidly through the clauses of the Bill, and, with regard to the curriculum clause, said education was going altogether too far. They must first have some privileges granted to pharmacists by law before educating so highly. Even if dispensing were kept simply to chemists as qualified men, he did not think there would be enough of it to make pharmacy a paying profession. They must go into trade and deal in patents and soaps and that kind of thing, but unless they were given more privileges to deal with drugs and chemicals he did not think that their position was worth much. He thought they ought to work more on the lines of making practical pharmacists, and not endeavour to make Fellows of the Royal Society and chemistry professors instead. Drapers and grocers served the community very well in their respective branches of trade, and they were not desired to go into the hotany of linen or to pass an examination in histology or morphology. (Applause.)

Mr. R. H. JONES thought if the Bill passed in its present form it certainly would not benefit anyone in business, but to the chemist's assistant it would make a great deal of difference, and he would command a better salary after it had been in working for a very short time.

Mr. PICKERING thought the smallness of the meeting amplified the fact of the lack of interest in the Bill, for which he had little good to say.

Mr. MORLEY also spoke favourably to the Bill, and was followed by Mr. LONSBROUGH and Mr. CURRY.

Liverpool Pharmaceutical Students' Society.

THE usual meeting was held on February 28 at the Liverpool School of Pharmacy, Mr. C. W. Cooke (President) in the chair.

Mr. HAROLD WYATT, jun., delivered a lecture on

THE PHARMACY OF THE LATIN NATIONS.

In the course of his remarks he said French pharmacy is the most typical of the Latin people, and gave examples of the prescriptions and the preparations most in use in France. Considerable attention was devoted to the directions for administering these, the lecturer contrasting the directions given in England in similar cases, so as to make the points more clear. The questions of manipulation and finish were then discussed, and the "sending-out" arrangements of a French pharmacy described. A series of prescriptions were then shown on the blackboard in French, Spanish, Italian, and Portuguese, in which the points of resemblance and difference were indicated. Emphasis was laid upon the importance of not reasoning by analogy, which will frequently land a dispenser imperfectly acquainted with the language into serious mistakes. Mr. Wyatt said that in Liverpool the prescriptions in Spanish, Italian, and Portuguese are far more common than French, and in his opinion it is worth the while of any dispenser to learn Italian and Spanish, so that he can translate such prescriptions with success. As a rule, most chemists have a smattering of French on which they can build a wider knowledge of the language. By this means they will not only increase their business capacities, but it will be the means of opening up to them the pleasure of enjoying a literature which is among the finest in the world. Mr. Wyatt then closed with a consideration of the Roumanian prescriptions, which are fortunately written in French: they are most frequently asked for by English or foreign sailors trading in Danube or Black Sea ports.

A hearty vote of thanks was accorded to the lecturer for his valuable remarks, which are of great value to dispensers in a great seaport like Liverpool.

Cambridge Pharmaceutical Association.

DR. E. LLOYD-JONES, of Downing College, gave an interesting lecture on "Antitoxins and Vaccines" to the members of the Cambridge Pharmaceutical Association in the large theatre of the New Museums on March 1. The lecture was

beautifully illustrated by lantern-slides, and a hearty vote of thanks was accorded to the lecturer.

Cardiff Chemists' Assistants' Association.

A MEETING of this Association was held on March 5, Mr. J. W. Cooper in the chair. Mr. A. S. SWADLING read a short paper on "Ointment-making." In the case of

UNG. ZINCI.

Mr. Swadling said, the oxide of zinc should be carefully sifted, then placed in a warmed mortar, and to it slowly added some of the melted lard, so that a smooth and even paste might be formed; then gradually added the rest of the melted fat, stirring well with the pestle until cold. This will produce a perfectly smooth, creamy ointment. The lard should be melted at a low temperature, for that is the secret of ointments keeping well.

UNG. AC. BORICI.

The boric ointment of the Pharmacopœia is much too hard; more soft paraffin is required. A mixture of about 1 part of hard paraffin and 9 parts of soft yields an ointment of good consistence. The boric acid used should be in the finest powder. The ointment should be made in a mortar in the same way as ung. zinci, but more care is required in stirring, as the boric acid soon gets into lumps. He found that customers preferred the yellow ointment of the 1835 Pharmacopœia.

UNG. HYDRARG. NIT.

Placing the mercury and nitric acid in a gallipot, and allowing the fumes of nitric oxide to gradually pass off, answers better than applying heat. Let them stand together for three days, occasionally stirring. Then warm a large jar, capable of holding about twelve times the quantity of ointment to be made, in a water-bath. Melt the lard with the olive oil, and pour into the jar. Add the nitrate of mercury, and stir the ointment well until cold. A flat piece of wood is the best kind of spatula to use for this purpose.

Edinburgh Chemists', Assistants', and Apprentices' Association.

A MEETING of this Association was held at 33 York Place, Edinburgh, on February 27, Mr. David Harley (President) in the chair.

Mr. PETER BOA read his paper on

OINTMENTS.

Ointments might be comprehensively described as articles of a greasy nature. It is important that the melting-point of an ointment should be a suitable one. The bases for ointments are various—such as lard, suet, beeswax, and paraffin. There are forty ointments in the Pharmacopœia, of which sixteen have a paraffin basis. The British Pharmacopœia is quite exceptional in this respect. In stiffening soft paraffin by means of hard paraffin the difficulty is to get a smooth ointment free from lumpiness. It is desirable that the ointment should have as presentable an appearance as possible. If triturated till cold there is a liability that in stirring the ointment portions of the mass solidify in lumps, and when these get into the body of the mass it is very difficult to get rid of them. He had on a former occasion suggested the best method is to melt the ingredients in a water-bath, and leave them to cool, and from experience he found this method work well. It is said that unless an ointment is triturated till cold it is not easy to get a plastic ointment, but there is no difficulty in rendering it perfectly plastic by merely rubbing it in a mortar. The only official ointment made by setting aside to cool without stirring is ointment of capsicum. In all ointments the greatest possible smoothness is a point always to be aimed at. This point comes out in making an ointment of bismuth oxychloride, with which a much smoother ointment can be got than with the subnitrate. It is important that the base be adapted to the particular purpose for which the ointment is required. In the case of active substances intended to be absorbed an animal fat is better than a paraffin basis. For that reason aconitine ointment is

ordered to be made with lard, while boric ointment, intended to act merely superficially, has a paraffin basis. Various devices are resorted to for getting smooth ointments. Many are familiar with the plan of putting the ointment in a piece of muslin and squeezing it through. The method answers fairly well with many ointments, but has the disadvantage of soiling the hands. A better plan is to take a piece of wire gauze, such as is used in a No. 20 or 40 sieve, and rub the ointment through. The process is simple, efficient, and cleanly.

Mr. C. A. MACPHERSON said the melting-point of ointments should be near the body-temperature. It is remarkable that in the home of soft paraffin—the United States—the Pharmacopœia has not a single ointment made with a paraffin basis. He thought it had been too indiscriminately adopted in the British Pharmacopœia, and is a mistake in the case of red oxide of mercury ointment. Knots in ointment are, he suggested, due to irregular cooling, the currents of cold air being outside rather than inside the containing vessel. In making ointments without stirring a mass is got that can be cut like cheese, and is very different in appearance from that obtained by stirring till cold. If the ointment is wanted soft it can easily be got so by rubbing in a mortar. Where heavy insoluble bodies are added to the fat it is necessary to stir, but how long to continue the stirring is an important point. The ointment does not require to be stirred till cold, but only till the mass reaches such a consistency that there is no danger of heavy matter subsiding.

Mr. MCDIARMID said the official basis for capsicum ointment is much too soft, and Martindale is right in suggesting that the spermaceti should be increased 50 per cent. The direction not to stir is intended, he thought, to secure the peculiar granular appearance of Smedley's chillie paste, of which capsicum ointment is an imitation. He had been a disciple of Mr. Boa's in the matter of non-stirring till recently, when, in making a 20-lb. quantity of resin ointment, he found the ingredients had separated. He has since reverted, for that ointment, to the stir-till-cold method. He thought the temperature of 180° F. or 190° F. quite high enough for ung. hyd. nitrat., and it gives as good a result both in appearance and keeping qualities.

Mr. CURRIE said the Pharmacopœia allowed dispensers to vary the proportions of soft and hard paraffin, but the latitude given is too great, and will lead to ointments having a very different appearance.

Mr. SIVEWRIGHT said an ointment of salicylic acid, where the dry powder is rubbed in, differed considerably from one in which the acid is partly dissolved. In the case of resorcin, if it is first dissolved by adding a little water the ointment is much more efficacious. An ointment of cocaine in vaseline has only about half the effect of an ointment made with an equivalent quantity of cocaine hydrochloride previously dissolved in water.

Mr. MIDDLETON said as a general rule in dispensing solids in ointments they should, as far as possible, be dissolved.

Mr. HILL said the objection to red oxide of mercury ointment is twofold. In the first place, the paraffin will not saponify and the ointment is much more difficult to wash off than when made with lard. In the second place, soft paraffin is open to the general objection that it makes a yellowish stain on linen which it is almost impossible to remove. The fatty basis for ointments is in practice frequently overheated, and even allowed to boil. Only sufficient heat to liquefy the fats should be used.

The CHAIRMAN said in prescriptions they hardly ever saw paraffin ointment ordered as a basis. There is a tendency to make ointments softer than was formerly the practice, and water very frequently enters into their composition. A very common basis in Edinburgh is a combination of almond oil, lanoline, and water.

A vote of thanks was passed to Mr. BOA, who in reply said that, operating on quantities of a pound or so of resin ointment, he has never any difficulty by the stand-till-cold process. He did not understand the separation of yellow wax and olive oil, unless the substances were heated to a high temperature and allowed to cool too quickly. Ointments should always be allowed to cool with a jacket of water or be wrapped round with a few cloths. In suggesting that a smooth plastic ointment can be obtained by rubbing through wire gauze, he did not abandon his belief that if an ointment

is made without stirring it will keep sweet probably twice as long as one stirred till cold.

Afterwards Mr. D. B. DOTT exhibited in operation a Le Bel Heminger tube in taking the boiling-point of chloroform, and also demonstrated by means of the polarimeter the process of taking the dextrorotatory power of a sample of oil of encalyptus.

Pharmaceutical Fauna.



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New Books.

Any book named in this list can be supplied post-free to any part of the world on receipt of the published price by the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Allen, A. H. *Commercial Organic Analysis*. 3rd ed. Vol. 3. Part 1: "Tannins, Dyes, and Colouring Matters, Writing Inks." Rev. and ed. by J. Merritt Matthews. 9½ x 6. Pp. 590. 18s. (Churchill.)

Forward, C. *All about Income-tax, House-duty, and Land-tax*. 7½ x 4½. Pp. 132. 1s. (Ward & Lock.)

Gregory, R. A., and Simmons, A. T. *Manual of Elem. Science: Course of Work in Physics, Chemistry, Astronomy, for Queen's Scholarship Candidates*. 7 x 4½. Pp. 438. 3s. 6d. (Macmillan.)

Hayes, F. C. *Handy Book of Horticulture. Intro. to Theory and Practice of Gardening*. 7½ x 5½. Pp. 238. 2s. 6d. net. (J. Murray.)

Leask, A. R. *Refrigerating Machinery: its Principles and Management*. 75 illus. 7½ x 4½. Pp. 308. 5s. (Simpkin.)

Ogden, J. B. *Clinical Examination of the Urine and Urinary Diagnosis*. Illus. 9¼ x 5½. Pp. 416. 12s. 6d. net. (Saunders.)

Oldberg, Oscar. *A New Chemistry, Inorganic, General, Medical, and Pharmaceutical*. Vol. I. (534 pages), net, \$3. Vol. II. (663 pages), net, \$4. (Chicago Medical Book Company.)

Wilson, J. C., and Eshner, A. A. *Text-book of Applied Therapeutics for Practitioners and Students*. 2 vols. 10½ x 6½. Pp. 1326. 30s. net. (Saunders.)

Observations and Reflections.

By XRAYSER.

LORD SALISBURY'S CONCESSION of a Select Committee on the question of shop-hours, and the reason he gave for yielding on this point, are welcome signs of grace. A year ago the Prime Minister thought he knew all about the conditions of shopkeeping, and he sneered Lord Avebury's Bill out of the House of Lords. Now he recognises the desirability of getting first-hand information from the classes affected as to their views, especially, as "with scarcely an exception members of the two Houses do not belong to the classes concerned." The case is similar, Lord Salisbury says, "to those concerned with temperance"; a curious confession. Unfamiliarity with conditions has not generally deterred Parliament from proceeding with measures which have commended themselves to its own fancies, but it is gratifying to find that the sarcastic Marquis has come to the conclusion that some acquaintance with the problem is a useful preliminary to legislation dealing with it.

THE PRIME MINISTER rightly judges that the interests of consumers—that is, customers—are as worthy of consideration as are those of shopkeepers. But he seems to assume that tradesmen and their customers are in a state of almost open warfare, and that the former need to be coerced into willingness to sell their wares. Nothing can be more certain than that in districts where late shopping is or seems to be necessary, the Act, if passed, would not be adopted. But there are many localities where the lives of thousands of people could be made more happy with practically no inconvenience to anybody, if the Legislature would consent to the exercise of a mild form of coercion of the petty minority which at present prevents the accomplishment of the object. What, then, is wanted? Not merely Lord Salisbury's vote nor the withdrawal of Sir Blundell Maple's opposition. The real essential is that the people who are to benefit should say, "We will have that hour." If only the army of shop-assistants could be induced to strike work for a single day unless it were conceded, the thing would be done.

THE GROCERCEUTICAL SOCIETY, or whatever it is to be called when it is created, will, it may be hoped, as one of its first duties, compile a Grocercopeia. This need not become an authoritative standard, but it would be useful evidence of what we might expect to get when we ask in a grocer's shop for such an article as marmalade or jam. The jam case at Worthing last week was a very interesting one to those to whom jam is a word with tender associations, and who, like the old lexicographers, see nothing unreasonable in deriving the word from the French *j'aime*. We (Mr. Otto Hehner, the Worthing Magistrates, and myself) are old-fashioned people—anti-glucosians, at any rate—who stupidly cling to the worn-out old dogmas we were taught in our childhood. We imagined that jam was, as the dictionaries define it, "a conserve of fruit prepared by boiling it with sugar to a pulp." That is how our mothers used to make it. And the old fogies who wrote the Encyclopædia Britannica go so far as to declare that the sugar must be cane-sugar or the jam will spoil. That, of course, is absurdly out of date. Even the Worthing Magistrates would allow beet-sugar to be used. But the jam-manufacturers, who at least know their business, are unitedly contesting this case in order to establish the right to use a certain proportion of glucose instead of sugar. About 30 per cent. of glucose is said to be the proportion used, and it is

fair to add that, according to the makers' testimony, they do not save any money by the substitution. The small gain in the price, they assure us, is fully balanced by the extra loss in the boiling. But they say that jam made with a certain proportion of glucose tastes better and keeps better than jam made with cane-sugar only. The dispute between this practical statement and old-fashioned prejudice is to be fought out at the Quarter Sessions.

MR. JAMES REID and Mr. Lord Gifford admiring each other is an edifying spectacle; but I suspect each of them could adopt the French cynic's reflection, "Quelque bien qu'on dise de nous, on ne nous apprend rien de nouveau." As to their discussion on the fundamentals of the Pharmacy Act, I think I am on Mr. Gifford's side, so far as I can understand him. I certainly consider that the principle of the Pharmacy Act, which I understand to be the qualification of all persons who sell or keep open shop for the sale of poisons, should be maintained, or the Act should be repealed. But then both gentlemen would probably subscribe to that doctrine. Wherein, then, do they differ? I, for one, have no idea. It is when they come to explain themselves that they bewilder us with their fluency. Mr. Reid, for instance, in his last week's letter, tells us that "the Pharmacy Act has been grossly maladministered in our law courts," that it is "quite buried in precedents and absurd decisions," and that "nearly every principle in it has been flouted in our law courts, and trampled under foot by the people." The utmost we can say is that in two or three instances the Act has not been construed in accordance with our views; but this hardly justifies the use of such language as I have quoted.

THE SALT CURE is the subject of a rather rhapsodic article in the *Contemporary Review* for March by Mlle. Claire de Pratz, and some chemists are pretty sure to be asked to prepare the prescriptions quoted in the article. It is not clear whether Mlle. Claire is a medical practitioner, or a patient, or merely a journalist; but the lady writes with the oracular authority which generally characterises both the first and the third classes mentioned. After mentioning the recent American craze, and briefly tracing the investigations which led Dr. Dujardin-Beaumetz and others to recommend certain vital injections, the lady comes to the experiments of Dr. Jules Cheron, the head physician of the Prison St. Lazare, who after ten years' study presented a report to the French Academy of Medicine, in which he concluded that "all hypodermic injections produce precisely the same effects whatever the liquid injected beneath the skin may be, so long as it is not toxic." His proposal was to administer 1, 2, or 3 grammes daily of an injection composed of sulphate of sodium, phosphate of sodium, and chloride of sodium, of each 1 gramme, phenol 50 centigrammes, and sterilised water 100 grammes. Why this compound of salts, if one liquid is as good as another for hypodermic injection, is not explained in the article. Dr. Cheron's treatment, we are told, soon restores strength, induces appetite—sometimes to the extent of "insatiable voracity"—and has marvellous effects in melancholia and neurasthenia. But it is not suitable for tuberculous patients, as it so accelerates the circulation as to seriously raise the temperature. But Dr. Cheron's salt-injection is a poor thing by the side of Dr. Robin's, who found that Dr. Dujardin-Beaumetz's serum-injections owed their efficacy to glycerophosphates, and consequently compiled the following formula:—"Glycerophosphate of pure lime 3 grammes, glycerophosphates of soda, of potash, of magnesia, of each 1 gramme, and of iron 50 centigrammes, tincture of nux vomica 50 centigrammes, maltine and pepsin of each 1 gramme, extract of kola-nut 5 grammes, and syrup of cherries 200 grammes." It would certainly be a mighty disease that would resist that array of remedies, but, if it should fail, Dr. Robin has a last resource in a cachet containing metallic "magnesium 10 centigrammes, glycerophosphate of pure lime 30 centigrammes, and fluoride of calcium 2 milligrammes: one to be taken at luncheon and one at dinner." The *Contemporary* competing with the *Family Doctor* is not a satisfactory sign of the times.

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Something to Think about.

THE simple measure dealing with limited-company pharmacy has grown into rather a formidable document now that the Pharmaceutical Society's solicitors, English and

Scotch, have worked their will upon it. Three months ago the Council produced a measure which was comparatively simple, in so far as it was a straightforward attempt to deal with the company-question, and although the Bill was burdened with a superfluous and unwieldy tail in the shape of the curriculum-cum-reciprocity clause, the provisions were, on the whole, acceptable to the trade. Then the Council added the compounding and dispensing of medical prescriptions to the provisions, which made it still more acceptable. The lawyers have expanded the seven clauses into fifteen, improved the phraseology here and there, sacrificed a principle or two, and incorporated several fresh principles and other interests. We print the Bill in full on page 384, but we may also show by comparison what has happened to it. By "keeping open shop" in the subjoined we mean for the sale of poisons, and dispensing, &c., medical prescriptions:—

December, 1900.

1. Any [registered] person keeping open shop shall provide actual personal control of a registered person in each and every shop.

2. Such person to register address of each shop and its manager.

3. Such person not to allow any but registered persons to sell or dispense.

4. Corporate body not to keep open shop unless each shop under personal control of registered person, whose name is notified to Registrar.

5. Address of company's shop and name of manager to be registered as 2.

6. Corporate bodies not to allow any but registered persons to sell or dispense.

7. Corporate bodies not to use Pharmacy Acts titles.

8. Any person acting as director of corporate body to be registered person.

9. Registrar to keep register of shops with names of managers.

10. Registrar to inquire names of managers by letter or verbally.

11. Refusal or neglect to give Registrar information under 10 constituted an offence; false information similarly.

12. Register open for inspection for 1s.

13. Power to require from Minor candidates "evidence of training in public university or kindred institution."

14. Power to divide the Qualifying examination.

15. Power to recognise other British certificates.

16. Power to the Council to make by-laws and regulations and abrogate regulations respecting 13, 14, and 15.

17. Act not to apply to Ireland.

18. To be construed with the Pharmacy Acts.

19. Penalties imposed.

March, 1901.

Unlawful for any person to keep open shop, unless each shop managed by a registered person.

Unlawful to keep the shop open unless address and manager registered.

Unlawful for such person to permit sale or dispensing in such shop otherwise than by registered person.

Any company, firm, co-partnership, or body of persons treated exactly as persons above, and included in same clause.

This provision included in a general disabling clause.

Unlawful for any company to retail, &c., unless business managed by one or more directors who are registered persons.

Same; but one register of shops and another of managers. Also has power to alter as required.

Same, in other words.

Same, in other words. See also new provisions.

The same, but Council to make rules for inspection. Other fees imposed (see later).

The same, but "university or other place of learning approved by Council."

The same.

The same ("United Kingdom, colony, or possession thereof").

Power given to the Society to make the by-laws.

The same.

This deleted.

The same.

NEW PROVISIONS.

1. Unlawful for any person, company, &c., to permit sale of poison by retail in unregistered shop.
2. Agencies for sale of poison made unlawful.
3. Address on poison-label to be that whereat sale takes place.
4. Fee for each registration, 2s. 6d.
5. Fee for certified extract from Register, 2s. 6d.
6. Such certified extract made evidence.
7. Unlawful to register a place which is not a shop or building rated to poor.
8. One person's name not to be registered as manager of more than one shop.
9. Registered person may not act as director of more than one company.
10. No entry is to be made in the new registers until requested by owner of shop.
11. Unlawful for Registrar to falsify register.
12. Offences by persons under 1852 and 1868 Acts made offences if committed by company, firm, co-partnership, or body of persons.
13. A provision as regards legal procedure in Scotland.

This summary sufficiently indicates that the lawyers and the Council have, by increasing the complexity of the measure, reduced the probability of getting it through Parliament this Session—if ever. The new provisions burden the Bill heavily, and invite fresh opposition. The inclusion of the agency and label matters while cases on these points may be regarded as *sub judice*, can scarcely be described as a stroke of genius, while the alteration of the terms of the qualified directorate, and the addition thereto of a new principle which prevents a registered person being director of more than one company (cogent as this appears) will not allay the opposition to this proposal in any quarter. The peculiarity of the new provision is that it limits the trading-powers of registered persons when they are associated with companies as directors, and not when they trade as individuals. Thus, as long as Mr. John Murison acts as managing director of Parke's Drug-stores (Limited), he must not be a director of any other drug company, but he may keep as many open shops as he likes under his own name, or be a partner in as many firms of registered persons as he chooses. The object of the provision is not clear, unless the director is regarded as an employé, instead of the principal, which latter is the reason for requiring him to be a registered person. The payment of 2s. 6d. as registration-fee for each entry in the registers of shops and managers has apparently been provided in response to the request of a few members of the Society. It means that all owners of chemists' shops throughout Great Britain will have to pay 5s. in respect to each shop, so that the Pharmaceutical Society will get 4,000l. or 5,000l. out of this job to begin with, and a small but steady revenue every year after in respect of changes of management and new ventures. This is decidedly clever considering that the object of the new registers is to assist the Council and the Registrar in administering the Acts. Why they should be paid for a service rendered to them is difficult to understand. The omission of the construing clause, which was in the original draft, is rather disquieting in view of the fact that Clause 2 of the Bill makes it "unlawful for any person . . . to keep open shop . . . unless *bonâ fide* conducted by a registered person," from which, in the absence of the construing clause, it may be inferred that it will be lawful for any person (cobbler, draper, or grocer) to keep open shop if *bonâ fide* conducted by a registered person. There are other points about the amended and extended Bill which are worthy of consideration, and while we do not question the honesty of the Council's efforts, they have now given us a document which *does* require, as one of the members said, most careful consideration. It cannot be regarded as the original draft, but as practically a new affair altogether, which should be taken on its merits; and it is in that light the trade should consider it.

How the Metric System Works.

THE British Foreign Office has recently obtained reports from His Majesty's representatives at various places abroad in reply to a circular asking for information as to the actual experience of nations which have adopted, for the purposes of trade, the metric system of weights and measures. The reports come from over forty countries, and they are, in the main, pretty conclusive as to the advantages of the system. For instance, the Secretary of the Legation at Buenos Ayres (Argentine Republic), after stating that the system became obligatory there in 1887, remarks that there can be no doubt as to its satisfactory practical operation, and that it has considerably facilitated the sale and purchase of imported goods from France and Germany. From Brazil, which adopted the system more than twenty years ago, it is stated that the introduction was effected with perfect ease, and that in its practical operation it is considered to have greatly facilitated calculations incident to commercial transactions. From Guatemala comes the remarkable statement that in 1894 the Government prepared a new Customs tariff based on the metric system, but nobody in commerce has ever taken notice of it. On the other hand, in Chili it is the general opinion that the use of the system in respect to measures and money has always been attended with great success, the system being of special importance in a country like Chili, where the rate of exchange is constantly fluctuating. It is claimed, too, that the metric method possesses the advantage of aiding the faculty of memory in a marked degree. In the State of Colombia the system was adopted as far back as 1853, and it is stated that the change has presented no difficulties, and is becoming more generalised every day. The Egyptian Government adopted the system in 1892, and since then it has come into general use in all Government departments. Most of the wholesale and retail trade of the country, however, is carried on by means of the old Egyptian weights and measures. In Japan, too, in spite of the legalising of the new method, it has not come into general use, the Japanese preferring their old style of calculation. The introduction of the metric system into Mexico is considered by the Government and by the public in general to be an unqualified success, and there is not the slightest desire or intention to return to the old system. It is stated that the commerce and trade of the country has benefited in two ways by the introduction of the new method. Internal trade has gained by its simplicity and uniformity, and commercial intercourse with foreign countries has been facilitated by the fact that Mexico possesses the same system as that adopted by the great majority of the countries with whom she does business. In Peru, however, in spite of the official adoption of the new method, old Spanish measures are retained for all ordinary commercial transactions. The effect, therefore, of the adoption of the system is said to be very unsatisfactory, because it has introduced confusion. The United States, like Japan, has legalised the new standard, but its use is not compulsory, and Mr. John Hay, the United States Secretary of State, expresses the opinion that, although the system has not been used to any extent by manufacturers, the recent acquisition of territory, in which it is already in use, must soon bring the matter to their attention in a very forcible manner. Our representative at Uruguay says that the metric system has been obligatory there since 1894, and, although the old system is dying hard, the general public are accommodating themselves to the change. In Venezuela, on the other hand, in spite of a compulsory law enacted in 1857, local usage still favours the ancient measures. In a separate report

European countries are dealt with. In Austria-Hungary the system has been compulsory for twenty-four years, and gives complete satisfaction. In Belgium it took about forty years to do away with the old system and establish the new one. Denmark has not yet adopted the metric method, although a Bill for legalising the system has passed the First Chamber of the Danish Parliament. The report from France is chiefly historical; but the main fact is that the authorities are unanimously of opinion that the adoption of the metric system has been commercially beneficial, and there is no desire to return to systems formerly employed. The new system has taken complete root in German commercial life, and its utility has been fully demonstrated, says Sir F. Lascelles. The change took place simultaneously with the political change of 1871, and foreign trade with countries where the metric system was already in force has been benefited by it. Although legally established in Greece, the system is a dead-letter, because its use is not compulsory. In Italy the change of systems has been very gradual, and in the Neapolitan provinces, even after forty years, it is still incomplete. In Lombardy, however, the change is stated to have been effected with comparative ease. Holland adopted the decimal system in 1816, and a transition-period of three years was allowed before the law came into force. It is curious to note that an extension of commerce is reported with countries which have not adopted the metric system of weights and measures—*i.e.*, Great Britain and British colonies. Russia has not yet adopted the metric system, although the question has been mooted since 1874; matters are now, however, assuming practical shape for the gradual introduction of a decimal system. Turkey also does not take kindly to the metric system of weights and measures, the people, as a rule, being ignorant and illiterate: the employment of it is now optional. Switzerland, Sweden and Norway, and Servia, all report in favour of the metric system and point out the beneficial effect it has had upon trade generally—especially foreign. This may be taken as the tenor of the reports as a whole, and to those who wish for a change from an unscientific to a scientific standard they will be found a good argument. It ought to be mentioned in conclusion, though it almost goes without saying, that the teaching of the metric notation is compulsory in schools in all the countries mentioned. It is curious that throughout the reports there is not a single fact which would relieve the burden of the real objection in this country and the United States to the compulsory introduction of the metric system—*viz.*, that an order to that effect would mean the loss of millions of money to our mechanical industries. In these the machinery designed to produce articles to size, the screws, and so on, are constructed upon measure-standards different from the metric system. One of the first things that would have to be done would be to get such machinery altered. In the textile industries alone the alteration of power-loom so as, for example, to adapt yard-wide looms to produce metre-wide cloth, means a stupendous loss of time and money. Other countries, even France and Germany, have not had this difficulty to face; the trading one was all that they have had to overcome, and, were that all with us, the metric system would have been adopted a generation since.

Unqualified Dispensers.

It is claimed on behalf of medical practitioners that there is no law to compel them to employ qualified persons as dispensers of their medicines. That is a statement which we cannot deny, and we presume that the general practice of employing unqualified dispensers in medical dispensaries may be taken as proof

that medical practitioners regard such procedure as a right. It may further be noted that the General Medical Council has substantially given official sanction to this action of medical practitioners, by contemptuously declining to interfere in the matter when attention was called to it two years ago by several prominent pharmacists, who pointed out the dangers of the position. It is well that this fact should be emphasised, because during the present year a number of deaths have been caused by careless dispensing in doctors' surgeries, and this week we report an inquest upon three victims who died in consequence of receiving strychnine dispensed by a medical practitioner's unqualified dispenser in mistake for *santonin*. A peculiarity in the case is that the first of the three children who died was certified by the doctor who prescribed for it to have died from "intestinal worms and convulsions." A few days later the mother gave the two other children the fatal worm-powders, and when symptoms occurred similar to those that the first child had suffered, another doctor was called in. He could not prevent death, but he was at least able to bring the whole facts to light so that they were made the subject of a coroner's inquiry. Although we have known of poisons being given for harmless substances by chemists, dispensing errors of this character are exceedingly rare, and we do not think that half-a-dozen fatalities have been reported during as many years. On the other hand, they are so frequent in medical practice that during the past six months we have reported a dozen fatalities. This is not at all inconsistent with the claim of medical practitioners that they may employ unqualified dispensers, but we do maintain that this practice is a serious public danger and that something should be done to put a stop to it. If, for example, the Poison Regulations which are binding upon chemists and druggists were equally binding upon medical practitioners, the strychnine bottle would not in the *Normanton* case have been similar to or kept beside the *santonin*-bottle. The mistake would thus have in all probability been avoided. For many years chemists voluntarily observed these precautions; why should doctors not also do so? But the general question still remains—viz. dispensing in doctors' surgeries. In most European countries it is unlawful for medical practitioners to dispense medicines, and this work is entrusted to pharmacists, because, for one reason, it is believed that this ensures the minimum of error, seeing that the pharmacist is able to check any inadvertence of the prescriber, while it is also a means of providing that any error in dispensing shall not be hidden. It has frequently been pointed out that the latter is a danger to which we are liable in England on account of the fact that under our system the man who is responsible for the dispensing of the physic is the person who also is authorised to write the death-certificate. The fact that coroners' inquiries are frequently held as a result of errors in doctors' dispensaries sufficiently indicates that personal and professional courage to face publicity is not dealt amongst medical practitioners; but the danger yet remains, and it is desirable that the attention of those in authority should be again called to this serious question. It will be remembered that a committee of the Council of the Pharmaceutical Society of Great Britain was recently appointed to inquire into these amongst other matters relating to public dispensing, and we trust that that committee will not scruple to make a thorough exposure of the prevailing system.

THE COUNCIL ELECTION.

Mr. Mackenzie's shrill slogan in regard to the coming pharmaceutical election recalls the fact that Monday,

March 18, is the last day on which members of the Pharmaceutical Society may be nominated for seats on the Council. The nominations must be in the Secretary's hands that day. Seven councillors are retiring, but are eligible for re-election. Last year three new men displaced as many old members, with, on the whole, good results; but it is perfectly apparent to everybody that the active minority on the Council is out-voted, and not three, but thirteen, new members are needed on the Council if new ideas are to get a chance. It is as easy for the members to secure that as to send back the seven retiring members. At all events the nominations of old or new are the first thing to be done. Any member of the Society may nominate another in writing addressed to the Secretary.

PHARMACEUTICAL SOCIETY'S BY-LAWS.

Mr. Duddridge, of Newcastle-on-Tyne, calls attention to a point in the draft Pharmacy Bill, Clause 7, which gives the Council power to make by-laws and regulations. His criticism was pertinent until the phraseology of the draft was altered by the lawyers, who have brought the language into accordance with the charter and Pharmacy Acts. Mr. Duddridge also calls attention to the procedure in the approval of by-laws by the members of the Society, and especially to the necessity for adopting or rejecting by-laws *en bloc*. This is an erroneous idea, although it happens to be the one upon which Mr. Carteighe, as President of the Society, and his successors have acted. In 1885 the by-laws were under revision, and a certain one, dealing with committees constituted of persons other than members of the Council, was introduced after the altered by-laws had been read a first time, the express purpose being to legalise the Executive of the North British Branch. The late Mr. G. W. Sandford strongly objected to the by-law, and at the general meeting of the Society he wished to have the objectionable thing rejected, but the President insisted that the by-laws should be passed or rejected *en bloc*. They were approved, but when they went to the Privy Council for ratification a number of protests were lodged with the Council, and, amongst others, was one calling attention to the President's ruling. The Privy Council did not approve of the by-laws, amongst the reasons given being the following:—

The members of the Society, assembled in special general meeting, have no right to propose amendments to the formulas referred to them under Section iv. (1), but they have a right to have the formula relating to each by-law submitted to them separately; that they cannot be required to accept or reject the propositions by the Council *en bloc*; that if the formulas were not submitted separately the alterations in the by-laws cannot properly be confirmed by the Privy Council till this has been done.

This ruling by the Privy Council was again ignored by the President of the Society (Mr. Walter Hills) several years ago, on the occasion of Mr. Wootton objecting to a particular by-law. It will be remembered that at the meeting of the Society in August last, when the new by-laws were approved of by the members, Dr. Symes objected to a portion of the amendments, and the motion for the confirmation of the by-laws was carried with his dissent against one by-law expressly entered. This dissent, in view of the Privy Council's ruling of 1885, is sufficient to secure the rejection of the by-laws by that Council. [Since the foregoing was written we learn that the Pharmaceutical Council has decided to ask the Privy Council to return the recently-amended by-laws for further consideration. This is in consequence of the Strachan decision, and we regard it as a complete justification of the Scotch protest. We hope when the by-laws again come forward for approval the *en bloc* system will be dropped.]

BAILDON ON STEVENSON.

Many amongst our readers have more than a passing fancy for Robert Louis Stevenson, the Scottish Elia, as some have

not inaptly but quite unnecessarily called him. To such readers, and to all who know not Stevenson, we commend the admirable study by Mr. H. Bellyse Baildon, which Messrs. Chatto & Windus have published this week. It is a well-done piece of writing, besides being a study in criticism and an appreciation of a dead friend, whose frailties are for the first time brought to light without that half-hidden apology which tempts the reader to think worse of the subject than he is entitled to by the facts. This was needed in regard to Stevenson, and Mr. Bellyse Baildon emphatically says although Stevenson sowed his wild oats he was "a good man." Mr. Bellyse Baildon's title to speak of Stevenson, apart from his skill as a writer, rests on the fact that both were boys together at the same school in Frederick Street, Edinburgh, and later at the University. The one influenced the other, as lads entering their teens, in literary matters of the school-magazine type, and the friendship between them was strong; indeed, Stevenson used to drag Mr. Baildon from his pharmacy in Princes Street to some sheltered nook in the gardens opposite, "and in pleasant fraternal converse we would report ourselves to each other and exchange mental electricities. When we had, so to speak, squared our mental accounts, or my duties recalled me, we would part, probably for months, till his cometary track again came into conjunction with my prosaic orbit, and he pounced on me for another day of reckoning." The basis of Mr. Bellyse Baildon's book was a series of articles on Stevenson which he contributed to the *Englische Studien*, a German review of English language and literature. The book consists of sixteen chapters, and a good bibliography and index. The first chapter is entitled "His Literary Achievement," and precedes a chapter on the childhood and youth of Stevenson. "His Literary Achievement" almost reveals the author's pharmaceutical training, for it strikes one as that touch of elegance—the sugar-coating—which one would expect of a pharmacist, and although convention would place it last, it is appropriate as the first chapter of a book which, besides revealing many characteristics of Stevenson which only an old companion could tell, is an excellent exposition of his works by a writer who does not allow friendship to warp his judgment.

COOPERS HILL.

A Blue-book was published last week in regard to the remodelling of the studies and the retirement of certain of the professors and lecturers of the Royal Engineering College at Coopers Hill. It goes back to February, 1894, when a committee, reporting upon the unsatisfactory financial condition of the College, stated that the College failed to pay its way because the number of students had fallen off, and owing to the high rate of expenditure on the teaching staff, which had risen from 5,300*l.* in 1873 to 9,053*l.* in 1894. The Committee found the proportion of professors to students was as high as one to four, and in the case of forestry students one to three. Colonel Otley, the President of the College, in June last year drew up a long memorandum on the educational course, and recommended in it a reduction of the professorial staff with a view to reducing the expenditure. He also recommended the remodelling of the chemistry course, confining it strictly to the acquiring of a knowledge sufficient to enable the students to interpret the results given by professional chemists, and suggests that for a highly salaried professor and a demonstrator a single teacher could be substituted, and the cost reduced from 1,305*l.* to 645*l.* After full consideration it was agreed to give the seven members of the staff three months' notice, although by the terms of agreement only one month's notice was required, and, further, to pay them a gratuity of three months' pay in addition to such pensions and gratuities as they might be entitled to. Accordingly the Secretary of State sanctioned the following pensions:—To Mr. Herbert McLeod, F.R.S.

(Professor of Chemistry), 456*l.*; Mr. Heath, 273*l.*; Mr. Hearson, 150*l.*; Mr. Stocker, 120*l.*; and to Mr. Shields a gratuity of 420*l.* We may say that the chemistry-demonstrator referred to in the report is Mr. Francis Edward Matthews, Ph.D., whose contributions to the Chemical Society are highly esteemed, and as he is not amongst those "retired" it seems that he will succeed Professor McLeod. A small committee of members of Parliament has been formed to request another interview with Lord George Hamilton in order to impress upon him the necessity for an inquiry into the whole circumstances. This committee was convened by Sir W. Anson, Sir Michael Foster, Mr. Millward, and Mr. C. P. Trevelyan on Monday, and members attended who represented all the British parties as well as all the Universities. It must be said, however, that the feeling is growing that some such steps as Lord George Hamilton authorised had to be taken sooner or later, and that although personal interests have been sacrificed betterment of the College has been secured.

Recent Wills.

GRIFFITHS.—The will of John Marriott Griffiths, chemist and druggist, of Farm Hill, Waltham Abbey, Essex, formerly of Market Square of the same place, who died on August 5, 1900, has been proved by the executrix and widow, Mrs. Margaret Griffiths. The gross value of the estate is 2,916*l.* 7*s.* 7*d.*, and the net value of the personality 2,899*l.* 1*s.* 5*d.*

HUSBAND.—The estate of Mrs. Anne Husband, of 80 Lexham Gardens, W., formerly of Exeter, who died on November 15, 1900, widow of Mr. Matthew Husband, of Fore Street, Exeter, and Leyburn, Yorks, wholesale chemist and druggist, has been valued at 6,982*l.* gross, and 6,899*l.* net.

MILLER.—The will of Mr. John T. Miller, pharmaceutical chemist, Crookesmoor Road, Sheffield, who died on December 7, 1900, has been proved. The executors are James Robinson and F. Wolstenholme, of Sheffield, and the value of the estate is sworn at 1,920*l.* 11*s.* 9*d.*

PARSONS.—The will of the late Mr. Thomas Parsons, of Mitcham, and of Parsons & Sons, varnish-manufacturers, 40 Long Acre, W.C., who died on November 1, 1900, has been proved by the executors, Mr. George Parsons, brother, and Mr. T. B. C. Edwards, solicitor, 57 Moorgate Street, E.C. The net value of the personal estate is 19,600*l.* 8*s.*, and the gross value of the whole estate 23,162*l.* 5*s.* 2*d.*

STEAD.—The will of the late Mr. John Mason Stead, pharmaceutical chemist, of 241 Camden Road, N., formerly partner in the firm of Hodgkinsons, Stead & Treacher (now Hodgkinsons, Clarke & Ward), who died on January 7 last, has been proved in the principal registry. The executors are Mr. Charles Hodgkinson, 101 Whitecross Street, E.C., and Mr. Clement L. Smiles, 15 Bedford Row, W.C., solicitor. The gross value of the estate is 35,988*l.* 5*s.*, and the net value of the personality 35,736*l.* 0*s.* 5*d.*

TURNER.—By his will, the late Mr. Charles Ernest Turner, pharmaceutical chemist, of 20 Bury Street, Bloomsbury, W.C., who died on December 20, 1900, appointed Thomas C. Hancock of 11 Balmuir Gardens, Putney, and Horace Thomas, of 47 Brunswick Road, Hove, as his executors. The will has now been proved at the principal registry, and the gross value of the estate is sworn at 10,151*l.* 8*s.* 5*d.*, the net personality being 9,885*l.* 8*s.*

DRUG AND CHEMICAL TRADE IN SERBIA. — Drugs, chemicals, and colours were imported, in 1899 to the value of 66,768*l.*, a sum which is 13,954*l.* in excess of the figures for 1898. Of this total, Austria-Hungary furnished 49,058*l.*, Germany 10,943*l.*, and the United Kingdom 2,203*l.* (chiefly varnish, indigo, and a little soda). Chemicals and drugs amounted to 24,950*l.*, an increase, as compared with 1898, of 7,106*l.*; "made up" drugs and medicines, 20,829*l.*, or nearly 2,000*l.* more than in 1898; dyes, 20,989*l.*, an increase of 4,889*l.* For the first nine months of 1900 the official returns show a total importation of "drugs, chemicals, and colours" valued at 221,050*l.*, which is 174,317*l.* in excess of the figures for the corresponding months of 1899. This large increase consisted almost wholly of chemical explosives for military purposes.

Legal Reports.

High Court Cases.

RESTRAINT OF PRACTICE.

IN the Chancery Division on March 1 the case of Daley v. Lynn came before Mr. Justice Buckley. Plaintiff is a doctor practising at Silverdale, Staffs, and he asked for an injunction to restrain the defendant, Dr. Lynn, till the trial of the action, for carrying on the practice of a physician and surgeon. Defendant was formerly an assistant to plaintiff, and on his engagement he, plaintiff stated, entered into an agreement not to practise or to assist another doctor in practice within five miles from Silverdale G.P.O. for a period of ten years after the termination of his engagement with Dr. Daley. In the end of 1900 plaintiff terminated his contract and set up in practise at Madeley, a village only three miles from Silverdale G.P.O. Defendant wrote to the plaintiff that he was entitled to practise at Madeley, as Dr. Daley had said he would not object to his practising anywhere within a mile of Silverdale. But this was quite contrary to what the plaintiff had said and desired in the matter. Counsel added that there could be no doubt about the reasonableness of the limitation. Defendant did not appear, and his Lordship granted the injunction asked for till the trial of the action, or for a period not exceeding ten years, till the termination of defendant's contract with the plaintiff.

IMPRISONMENT UNDER THE PHARMACY ACTS—APPEAL.

AT the Justiciary Appeal Court, Edinburgh, on March 4, before Lords Justices Kyllachy and Low, this case was heard, in which the principal question argued was whether under a conviction for a contravention of the Pharmacy Acts of 1852 and 1868 a term of imprisonment can be imposed in default of the fine not being paid. The question came up in connection with the suspension of a conviction passed upon Andrew Gardner, 119 High Street, Linlithgow, by Sheriff-Substitute Macleod, for having sold a poison to Mr. J. Rutherford Hill on November 3 at the shop 67 High Street, Linlithgow, he not being a qualified pharmaceutical chemist or chemist and druggist. He was fined 2*l.* and 1*l.* 2*s.* expenses, or in default of payment three days' imprisonment. The complainer contended that the complaint, so far as it concluded for imprisonment, was incompetent. An objection was also entered that, assuming that imprisonment was competent, the power of arrestment should have been exercised before imprisonment was enforced. Mr. Orr and Mr. Lyon Mackenzie appeared for the complainer, and Mr. Salvesen, K.C., and Mr. T. B. Morison for the respondent, the Registrar of the Pharmaceutical Society.

Mr. Lyon Mackenzie stated the complainer's case, and, in answer to Lord Justice Kyllachy, said it was only against the imprisonment that they asked suspension. They submitted that the penalty of imprisonment was not provided for under the Pharmacy Act, 1868, consequently the complaint was bad, because the penalty imposed went beyond the statute.

Lord Kyllachy asked if the Pharmacy Act was founded on by the other side?

Mr. Salvesen: We say the Pharmacy Act does not exclude imprisonment, and that it can be imposed under a subsequent statute.

Mr. Lyon Mackenzie contended that the Pharmacy Act provides that in so far as its provisions were contravened the offender must be dealt with entirely by means of a civil action, and in no sense came under the criminal Acts. Under the Pharmacy Act, 1852, it was expressly provided that the penalty might be recovered by the Registrar in Scotland by an action in the Court of Session in ordinary form, or by a simple action before the Sheriff of the county, or in royal burghs before the magistrates of the burgh, and in England and Wales in the same way as small debts were recovered, and although the action might be brought under the Summary Procedure Act, the provisions of that Act enforcing imprisonment where there was failure to pay the fine did not apply. He could see that prior to 1880 there

might have been something to be said for the view that a person could be imprisoned for failure to pay a debt, but since the Debtors Act of 1880 debarred imprisonment for debt, he submitted that that brought this under the category of actions where the power of imprisonment was expressly taken away as one of the remedies open to the respondent, and that therefore Section 6 of the Summary Jurisdiction Procedure Act, 1881, did not apply. A complaint of this nature must be dealt with in the manner provided by the Pharmacy Act. His contention was that the 1868 Act, read with the 1852 Act, absolutely excluded punishment by imprisonment. He proceeded to argue his next point, that the complaint was bad in respect that assuming that punishment by imprisonment could be enforced, execution of arrestment was not authorised by the Sheriff before the award of imprisonment.

Mr. Salvesen pointed out that no notice had been given of that objection. The only question of law was whether imprisonment was competent.

Mr. Mackenzie submitted that in this case the Sheriff had prematurely given an alternative of imprisonment. The complainer might not have any goods to poind, but he might have a bank account which could be arrested. On these grounds he asked their Lordships to sustain the suspension asked for.

Mr. Morison, for the respondent, contended that the complaint was competent, and that the suspension should be refused. It was admitted that this complaint was properly brought under the Summary Procedure Act of 1881. That Act was described in the preamble as one to extend certain provisions in the Summary Jurisdiction Act of 1879, and was to be construed along with the Summary Procedure Act of 1864. Among other things that statute extended the power of imprisonment to every case in which the remedy of poinding had prevailed.

Lord Kyllachy: No matter although the principal Act excluded imprisonment.

Mr. Morison: That is so. The Pharmacy Act, he contended, did not exclude imprisonment, although it did not authorise it.

Lord Kyllachy remarked that the power of imprisonment under the original Act was abolished by the Debtors Act of 1880.

Mr. Morison said then the 1881 Act came in and applied to the 1852 Statute. It directly said that in default of recovery by poinding and sale, warrant for imprisonment should also be competent. His case was complete when he had the Act of 1881 read into the Pharmacy Act of 1852. The schedule K4 of the 1864 Act came in there, and that was the form which the Sheriff had used in this case. He thought the Sheriff would have been in a far more difficult position if he had put in arrestment. There was no mention of arrestment in Section 12 of the Pharmacy Act—nothing to authorise arrestment. In any case the Sheriff had not concluded this matter, and the complainer's objection to imprisonment seemed to him to be premature at this stage. All the Sheriff had done was to threaten the suspender that if he did not pay he would be imprisoned. He had not granted warrant of imprisonment. The objection would more properly come up after the Sheriff had granted a warrant for imprisonment.

Mr. Orr, replying at length for the complainer, argued that imprisonment in these cases was abolished, and, further, that although one of the Pharmacy Acts had been in existence since 1852, there had never been an attempt to imprison under any conviction since that time. In this matter they were confined within the four corners of the Pharmacy Acts, the provisions of which were wholly for the recovery of civil debt, which they were precluded from recovering by means of imprisonment.

Lord Kyllachy thought the wording of the 1852 Act would not exclude imprisonment.

Mr. Orr: However that might be, since 1880 imprisonment for civil debt was no longer competent, and they could not found on a power of imprisonment in the Summary Procedure Acts, where they had provision so complete and clear as in the Pharmacy Acts. Again, in this case the magistrate had simply put in imprisonment without giving the accused the opportunity of any of the intermediate steps, and he submitted that though imprisonment might be competent, that was only competently arrived at after the

intermediate steps of pointing and arrestment had been exhausted under the statute.

Mr. Salvesen, for the respondents, argued that it was plain that imprisonment was the complement of the execution by pointing. The Summary Procedure Act of 1864 said that imprisonment should be competent unless recovery by imprisonment be excluded by the terms of the principal Act. That meant expressly excluded, and not implicitly. He contended Mr. Orr's main contention was unfounded. He argued that the Act of 1862 provided for recovery by pointing. The 1881 Act said that wherever there is an Act of Parliament which provides that the penalty might be recoverable by pointing, they might enforce that within a warrant of imprisonment, and he submitted on these grounds, which were alternative, they were entitled to have the bill of suspension refused.

Their Lordships reserved judgment.

THE WRONG MEDICINE.

IN the Court of Session, Edinburgh, on March 4, before the Lord Justice Clerk and a jury, John L. Robertson, commission agent, Glasgow, sued Cockburn & Co. (Limited), chemists, 56 and 58 St. Enoch Square, Glasgow, for 1,500*l.* as damages for injuries sustained through having partaken of poison said to have been supplied to him by the defenders instead of an innocuous mixture prescribed by his medical attendant.

Before witnesses were examined the evidence of James Brown, taken on commission before he left for South Africa, was read. He stated that he was 18 years of age, and that he had been in the employment of the pursuer, John Leslie Robertson, commission agent, for two years. He remembered being sent on November 22, 1899, by the pursuers to the shop of Messrs Cockburn & Co. (Limited).

Pursuer stated that he sent two prescriptions to the defenders to be made up—one for a mixture for internal use, and the other for an ointment. He received from the defenders a bottle containing A.B.C. liniment, a quantity of which he swallowed, with the result that he remained ill for a considerable time. Sheriff-Substitute Balfour, before whom the case was heard in the Sheriff Court, pointed out that the bottle was marked "Poison, not to be taken," and was marked for "Mrs. Robertson," and holding that the pursuer was guilty of contributory negligence in taking any of the contents of the bottle in face of the words and directions on the label, dismissed the action, with expenses. On appeal the Second Division held that the Sheriff-Substitute had made a mistake in disposing of the case without inquiry, and sent the case to trial by a jury. (See *C. & D.*, December 15, page 963.)

In the course of the examination of the medical witnesses Dr. Napier was asked whether any skilled chemist would know that "A.B.C." liniment contained aconite, belladonna, and chloroform. Witness replied that he would know it contained a deadly poison, and he ought to have known that active measures should be taken in such a case as this. Syrup of tolu and mucilage was only a simple local emollient.

By the Judge: One who did not know that an emetic was necessary did not know his business.

Dr. Alex. Roxburgh corroborated this, and Dr. McVail, one of the Scottish members of the General Medical Council, who examined Mr. Robertson on January 29, said: If he had been treated with ordinary skill the chemist would at once have given him an emetic and sent for proper medical assistance.

The trial was resumed on March 5, when evidence was given by Mr. Henderson, Cockburn's manager, who detailed how the mistake had occurred by pursuer being given A.B.C. liniment for a "Mrs. Robinson" in mistake for the mixture belonging to him. When Mr. Robertson came into the shop and complained of his throat, witness gave him some syrup of tolu and jujubes. The liniment was in a ribbed poison-bottle bearing a coloured poison-label. Cross-examined: Cockburn & Co. was a limited concern, and witness was chief manager in that shop. It was a chemist-and-druggist business. They conducted the business in accordance with the Pharmacy Acts. Witness was not a qualified chemist, nor were Mr. Hannay or Mr. Deans, the men who dispensed the medicine and handed it out. Mr. Dickie was not a registered chemist at the time, but he was now.

Can you give any explanation of the conducting of this business on the principle of dispensing and supplying medicines to the public without one single pharmaceutical chemist?—The Pharmacy Act states that all that is required is a qualified manager or assistant, and we have a qualified assistant in the place. That is your view and your defence for this system?—Yes. Mr. George Banks was the qualified assistant. He did not dispense this medicine. Asked what advantage it was to their purchasers to have on their premises a man who had qualifications, but never put them to use, witness replied that he supervised. Had any person who saw and handled this medicine a certified qualification?—I would not go that length; Mr. Banks saw the medicine. Is that a sample of the way you conduct business?—No answer.

John Dickie, one of the assistants in the shop, said he heard pursuer's messenger ask for "Robinson's" medicine—not for J. Leslie Robertson's medicine. He looked for it, and found a bottle for Robinson. He asked the boy if that was it, and he said "Yes." Witness wrapped up the bottle, and gave it to him.

The Lord Justice Clerk, in delivering his charge to the jury, said this was an unprecedented case. He had never heard anything like it in his life. Notwithstanding the remonstrances on the part of Mr. Robertson, he had not got what he had ordered. No inquiry was made. They were told it was a practice of the shop that if anybody came in complaining of a mistake, and the man to whom he complained did not know the particular matter, it was usual to speak to the other assistants and inquire about it, or speak to the manager. The witness said: "I cannot say why I did not do it on this occasion." That was a very unfortunate thing indeed. The result was that Mr. Robertson had as regarded that bottle the assurance twice over that the bottle was in fulfilment of his order. If it was attributed to the pursuer that he did not examine the bottle it would make a totally different case, and it was for the jury to judge whether he was or was not a contributory to the accident. It was, his Lordship thought, after a twice-over assurance, natural that he should take a dose, the results of which had led to this action. The question was whether there was failure of duty on the part of the people in this chemist's shop. Upon that matter they had had the evidence of the way in which the business was conducted. In chemists' shops necessarily the greatest possible care ought to be exercised. Had it been exercised on that occasion? His Lordship could not help being astonished at the apparent flippancy with which the matter had been treated by the firm of Cockburn (Limited). Mr. Robertson went down to the shop with the bottle. Mr. Henderson said there was no cover on it when he handed it to him. But whether there was a cover on it or not Mr. Henderson knew perfectly well that somehow or other this was a grave and dangerous matter. He was told by the pursuer that he had taken a dose out of that bottle, and the bottle showed that a certain quantity had been taken out of it. Yet Mr. Henderson took it upon himself to assume, and the others with him, that they were being told an untruth—an absolutely objectless untruth so far as Mr. Robertson was concerned. What reason Mr. Robertson would have for telling a deliberate lie upon that matter he was utterly unable to conceive. They said they did not believe him, and gave him a demulcent—tolu stuff and jujubes. But if there was a possibility even in anybody's mind of his having swallowed a quantity of that stuff any sensible man would have at once proceeded to make the most careful investigation, and have assured himself that there was no mistake. They considered it from their skill to be impossible for the man to be standing upright after taking a dose of the liniment, and they chose to assume that he was telling a lie. He had seldom in the course of his experience, seen anything occur in the course of a civil trial which had been the cause of so much regret as the way in which this man was treated. The results had been much more serious than if he had been at once dealt with.

The jury, after half an hour's absence, returned a unanimous verdict for the pursuer, and awarded 700*l.* as damages.

INCANDESCENT MANTLES.

On Wednesday Mr. Justice Channell, on the application of the Welsbach Incandescent Gas Light Company (Limited),

granted an injunction against Mr. A. Krumm, 85 Upper Alma Street, West Hartlepool, restraining him from infringing the plaintiffs' Letters Patent No. 124 of 1893 by the sale or use of mantles manufactured in infringement of the said letters patent. In the course of the hearing, Professor Dewar gave evidence to the effect that one of the mantles alleged to be an infringement and to have been sold by the defendant was made under the patent No. 124 of 1893. Mr. H. Ballantyne also stated that the 1893 patent was an entirely new invention, and was not anticipated by the patents of 1835 or 1833, which was defendant's contention. His Lordship, in granting the injunction asked for with costs, made an order for delivery up of all infringing mantles in the possession or under the control of the defendant. He also granted a certificate that the validity of the Letters Patent No. 124 of 1893 had come into question.

Medicine-stamp Acts.

HAD NO LICENCE.

AT Hull on February 27, Thomas Hill was summoned for selling the preparation of an American Drug Company, known as "Native herbs," without a licence. An Inland Revenue officer purchased a box of the patent medicine (which was in tablet form) for 4s., and, in reply to a question, defendant admitted that he had not a licence to sell the medicine. Defendant produced a pedlar's certificate, but was informed that it did not entitle him to have patent medicines, and a fine of 10s. and costs was inflicted.

Sale of Food and Drugs Acts.

STRAWBERRY JAM.

THE Worthing Magistrates were occupied on February 27 in hearing a case in which a local grocer was summoned for selling strawberry jam which contained 12 per cent. of starch glucose and 32 gr. per lb. of salicylic acid. Mr. Otto Hehner, the public analyst for West Sussex, certified that the starch glucose employed was quite free from every trace of arsenic, but he considered that the use of glucose and salicylic acid in jams was both unnecessary and improper. Mr. Beck, of London, who had been instructed by the manufacturers of the jam to defend the case, called a number of expert witnesses, including Professor Goodfellow, of the East London Technical College, who testified that the use of glucose and salicylic acid in the making of jam helped to preserve it, and was really beneficial. The Magistrates, however, decided that jam was fruit boiled down with either cane or beet sugar, and that the article demanded by the purchaser had not been supplied, and the defendant was accordingly fined 1l. and costs. Mr. Beck gave notice of appeal, and, pending the result of this, summonses of a similar character against three other local tradesmen were adjourned.

County Court Cases.

SALE OF A BUSINESS.

AT the Southwark County Court on March 5, before Judge Addison, K.C., Arthur Bradshaw Passmore, chemist and druggist, Tulse Hill, and 89 Union Road, Borough, sued F. A. Everingham, chemist and druggist, 43 Trinity Square, Newington, to recover 13l. 8s. 8d. of which was money which the defendant received, or but for his wilful default or negligence he might have received, for the use of the plaintiff in respect of the takings of the chemist's shop 89 Union Road, from November 29 to December 13, and 5l. damages for breach by the defendant of his agreement to purchase the plaintiff's business and stock-in-trade at the address mentioned.

Mr. Aldous, solicitor, appeared for the plaintiff, and Mr. Lincoln Reed, barrister, for the defendant, who counterclaimed for 7l. 17s. 6d., being two and a half week's salary earned by him as manager of the plaintiff's business.

The plaintiff stated that he carried on business at 89 Union Road for about twelve years, but in May, 1899, he took another shop at Tulse Hill. He put a manager into the Union Road shop, but the takings gradually dropped from

over 600l. per annum to below 200l. He therefore decided to sell the business, and mentioned the matter to a traveller, who introduced the defendant, and on November 26 agreed to sell the business to defendant for 150l.—125l. to be paid in cash, a bill to be given for the remainder at three months. On that day defendant was leaving the situation he was then in, and his (plaintiff's) manager was also leaving Union Road. Consequently he handed the defendant the lease of the premises then and there, and met him at the shop at half-past 10 o'clock the same night and gave him possession. The next day he received a postcard saying it would not be convenient for the defendant to see him until a day later, but as this was inconvenient to plaintiff the payment went over. When some days later he applied for the 125l., the defendant repudiated the agreement to purchase and plaintiff had to retake possession. The defendant was in the shop seventeen days, and the takings for that period were entered at only 4l. 8s. or 3l. 17s. 2d. net.

Mr. Wilson Taylor, traveller for Antifermentine (Limited), said he took an order from the defendant at the shop in Union Road on November 27. The order was booked in the defendant's name. The next day his firm received a postcard from the defendant telling them not to execute the order, as the agreement for the business was not then signed. Witness went to the shop between 5 and 6 o'clock in the evening and found it closed.

Herbert Waugh, now manager at the shop, said the defendant called at Tulse Hill and told him to tell Mr. Passmore that he (defendant) would purchase the business on the terms stated in his letter—namely, for 150l.

The defendant denied that he ever made the statement alleged by the last witness. He knew the business and of the existence of a drug-store in the immediate neighbourhood, and a "sixpenny doctor's" a few doors off. The plaintiff offered to sell him the business for 175l., but he would not give more than 150l. for it, which the plaintiff refused to accept. Witness then disabused his mind of it entirely. Plaintiff then said his assistant was leaving that night, and as he knew he (defendant) was leaving his situation at the same time he asked him if he would look after the business and work it up, and they might come to terms. Witness agreed, but reminded him that there had been no arrangement between them. As to the lease, he gave plaintiff a receipt (produced), on which was written, "For perusal only." He found the shop in a very bad condition, and with hardly any stock. Three times plaintiff visited the shop, but he did not on either occasion ask for 125l. or say anything about him having purchased the business.

His Honour: According to his own case, he went in there for his own purposes to see whether the business would suit him, and not to be paid for his services.

After a long hearing, his Honour found that there was an agreement by the defendant to purchase the business for 150l., and entered judgment for the plaintiff for 12l. and costs.

VETERINARY DRUGS.

AT the Bridgend County Court before Judge Williams last week, Mr. Caleb Davies, chemist, Pontyymmer, brought an action against the Darran Colliery Company (Limited) for 6l. 13s. 10d., in respect of drugs supplied for the horses working at the colliery. Defendants pleaded that they were not the proper defendants, and that the goods were supplied to Mr. Edward Lawrence, managing director of the company. Solicitor for Mr. Davies then applied that Mr. Lawrence's name be added to the defendants. For the defence, it was pointed out that the date of the last account rendered was dated October, 1898, whereas the certificate of incorporation of the company was dated March, 1900, so that the latter could not have incurred the debt. It having been further remarked that Mr. Lawrence was prepared to pay any amount which could be proved to be owing, his Honour interpolated, "Then I add Edward Lawrence as defendant."

The plaintiff having given evidence in support of his case, his Honour gave judgment against both defendants.

TRADING TITLES.

IN the Chancery Court of Lancashire on March 4, before Vice-Chancellor Hall a motion was heard at the instance of the Surgical Supply Association (Limited), of 35 Market Street, Manchester, for an injunction restraining Stephen Thistlewaite, of 33 Piccadilly, Manchester, from carrying on

business under the name of the Medical and Surgical Supply Company, or any name so nearly resembling the name of the plaintiff company as to be calculated to deceive the public or induce the belief that the business carried on by the defendant is the same, as the business carried on by the plaintiff company. Mr. Eastwood, who appeared on behalf of the plaintiffs, stated that the defendant had offered certain terms, which the plaintiffs were prepared to accept; and the Vice-Chancellor eventually granted an order in the terms agreed to by the parties interested in the case.

Bankruptcy Report.

Re ELEANOR STEAD, trading as a chemist and druggist, 8 Farnworth Street, Farnworth, and Simms Cross, Widnes.

The unsecured debts amount to 323*l.* 16*s.* 10*d.*, and the assets, after deducting 29*l.* 13*s.* 8*d.* due to preferential creditors, are 49*l.* 4*s.* 10*d.* This, however, includes 14*l.* deposited with the bankrupt's solicitor for the costs of the petition, the remainder being made up of 1*l.* 18*s.* 6*d.* cash, 19*l.* stock-in-trade, 23*l.* fixtures, &c., and 15*l.* furniture. The bankrupt alleges as the causes of her failure, "competition, bad trade, and want of capital." Her husband died about ten years ago. About twenty years ago her father purchased the chemist's business at Simms Cross, Widnes, and the Farnworth Street business, and she alleges, gave them to her, and she has traded in her own name since that time. She had no free capital. The Farnworth Street shop was simply used as a small sundries' store, and the Simms Cross chemist's shop was managed by her husband up to the time of his death. She then engaged another manager, and for six years previous to July last this shop was managed by her eldest son, who is a qualified chemist. For the last six months she personally looked after both businesses, but had only been able to sell small sundries.

The statement of affairs shows fifty-one unsecured creditors for goods supplied, the principal being:—

	£	s.	d.
Ayrton & Saunders, Liverpool ...	31	0	0
Calvert Brothers & Co., Liverpool ...	9	3	8
Glendinning & Son, Newcastle-on-Tyne...	9	0	0
Richardson, E., & Son, Warrington ...	21	0	0
Sumner, R., & Co., Liverpool ...	88	0	0
Thompson, J. (Limited), Liverpool ...	53	7	9

Deeds of Arrangement.

Clayton, William Arthur, Lyndhurst, Foulby, near Wakefield, physician and surgeon. Trustee, Harry Hughes, George Street, Wakefield, I.A. Dated, February 20; filed, February 22. Liabilities unsecured, 325*l.* Estimated net assets, 300*l.* Deed of arrangement with a view to payment of creditors in full, debtor covenanting to pay to trustee every lunar month, commencing March 3, 1901, a sum of not less than 10*l.*, secured by an assignment of personal property, book-debts, &c., upon trust to allow debtor to use same until default, under the supervision of the trustee and committee of inspection. The following appear as creditors:—

	£	s.	d.
Hall & Armitage, Wakefield ...	46	0	0
Hebblethwaite, C., Wakefield ...	23	0	0
Legat, W. H., Bolton ...	31	0	0
Reynolds & Branson (Limited), Leeds ...	36	0	0
Sumner, R., & Co., Liverpool ...	14	0	0
Bankers' claims ...	64	0	0

Sawyers, Joseph Page, 61 and 63 Market Place, Whitehaven, wholesale drysalter. Trustee, James D. Baxter, 75 Duke Street, Whitehaven, solicitor's clerk. Dated February 21; filed, February 23. Secured creditors, 80*l.* 2*s.* 9*d.* Liabilities unsecured, 980*l.* 19*s.* 4*d.* Estimated net assets, 839*l.* 17*s.* 3*d.* The following are amongst the creditors:—

	£	s.	d.
Batger & Co., London ...	11	0	0
Cohnan, J. & J., London ...	20	0	0
Crosfield, —, Liverpool ...	29	0	0
Fry, J. S., & Sons, Bristol ...	47	0	0
Gossage, W., & Sons, Widnes ...	10	0	0
Lancashire Vinegar Company, Manchester ...	14	0	0
Price's Patent Candle Company (Limited), London ...	102	0	0
Reckitt & Sons, Hull ...	32	0	0
Salt Union (Limited), Middlesbrough ...	15	0	0
United Alkali Company, Liverpool ...	15	0	0
Wilkinson & Simpson (Limited), Newcastle-on-Tyne ...	41	0	0
Wilkinson, R. W., Pontefract ...	10	0	0

Barstow, Charles Henry, trading as Powell & Barstow, 8 and 58 Blackfriars Road, and residing at 12 Burleigh Mansions, Charing Cross Road, W.C., surgical-instrument maker. Trustee, Sidney Cronk, 43 and 44 Lombard Street, E.C., accountant. Dated, February 19; filed, February 26. Liabilities unsecured, 7,649*l.* 7*s.* 5*d.*; estimated net assets, 6,000*l.* Amongst the creditors are the following:—

	£	s.	d.
Andre & Co., Paris ...	11	0	0
Andrew & Bramall, London ...	24	0	0
Barker, H., London ...	42	0	0
Benda Brothers, London ...	14	0	0
Blundell, A. P., Taylor & Co., London ...	10	0	0
British & Foreign Bottle Company, London ...	10	0	0
Clark, Son & Platt, London ...	750	0	0
Cocking, J. T., Plymouth ...	15	0	0
Currie, W., & Co., London ...	57	0	0
Distillers' Company (Limited), London ...	10	0	0
Doherty, E., & Co., London ...	26	0	0
Dyas, W. J., Toronto ...	17	0	0
Ellis, Son, & Paramore, Sheffield ...	83	0	0
Face & Chopin, Paris ...	12	0	0
Farwig, Johnson & Co., London ...	15	0	0
Feix Brothers, Albrechtsdorf ...	12	0	0
Gilot, C., Paris ...	41	0	0
Glover, T., & Son, Nottingham ...	23	0	0
Hall & Bevington, London ...	20	0	0
Hoare, A., London ...	12	0	0
Hutchinson & Co., London ...	103	0	0
Keywood & Goodwin, Nottingham ...	175	0	0
Lambert, S., & Co., London ...	10	0	0
Leyland & Birmingham Rubber Company, London ...	17	0	0
Lockharts, London ...	18	0	0
Markt & Co. (Limited), London ...	12	0	0
May, Sykes, & Co., London ...	126	0	0
Maygrove, J., & Co. (Limited), London ...	34	0	0
Moseley, David, & Sons, London ...	37	0	0
Newsome, C., London ...	16	0	0
Nobles & Hoare, London ...	111	0	0
Padmore, E., & Son, Birmingham ...	15	0	0
Pimm, J. W., Staines ...	200	0	0
Powell, T. (Limited), London ...	4,000	0	0
Powell, W. (Exors. of), London ...	450	0	0
Robinson & Sons (Limited), London ...	13	0	0
Simpson, J. H., & Co., London ...	13	0	0
Skinner, R., London ...	45	0	0
Slatter, W., London ...	34	0	0
Solport Brothers, London ...	27	0	0
South Metropolitan Gas Company, London ...	31	0	0
South Metropolitan Gas Company, London ...	51	0	0
Stone, R., London ...	37	0	0
Surgical Hosiery Company (Limited), Nottingham ...	272	0	0
Wattenbach, Oscar, London ...	31	0	0
Windley & Co., Nottingham ...	15	0	0

Gazette.

Partnerships Dissolved.

Crocker, J. H., and **Sidley, G.**, under the style of Crocker & Sidley, Eccles, Lancashire, physicians and surgeons.

Hookham, P., and **Ayre, F. J.**, under the style of Hookham & Ayre, New King's Road, Fulham, S.W., surgeons, &c.

Lowcock, M. A., and **Holliday, J.**, under the style of the Pure Water Company, West Hartlepool, mineral-water manufacturers.

The Bankruptcy Acts 1883 and 1890.

RECEIVING ORDER.

Hackney, W. F., South Street, Earlsfield, S.W., wholesale and retail chemist.

From the "Edinburgh Gazette."

Creditors of **Andrew Morrison**, 136 Cowcaddens, Glasgow, chemist and druggist, will receive a dividend on April 13, in the office of Messrs. John Wilson & Stirling, 154 St. Vincent Street, Glasgow.

New Companies & Company News.

WIDNES BORAX AND CHEMICAL COMPANY (LIMITED).—Capital 20,000*l.*, in 1*l.* shares. Objects: To carry on the business of miners, refiners, distillers, and manufacturers of and dealers in boracite, borax, boracic acid, and any chemical or other preparation.

M. E. HOLDSWORTH (LIMITED).—Capital 5,000*l.*, in 5*l.* shares (800 6-per-cent. cumulative preference). Objects: To acquire the business of a drysalter, produce-merchant, and commission-agent heretofore carried on at 3 Norfolk Street, Bradford, and elsewhere as "M. E. Holdsworth," and to carry on the business of drysalters, produce-merchants, grocers, chemists, druggists, warehousemen, merchants, commission-agents, dyers, shipowners, &c. The first directors are M. E. Holdsworth, Ernest Hickson, and John Keighley. Registered office, 3 Norfolk Street, Bradford.

LUMIERE NORTH AMERICAN COMPANY (LIMITED).—Capital 200,000*l.*, in 1*l.* shares. Objects: To acquire from the "Société Anonyme des Plaques et Papiers Photographiques a Lumiere et ses fils" (hereafter called "The French Company") the right to manufacture and sell in North America, or in any other country where they may be able to acquire similar rights, photographic plates and materials in accordance with the process used by the French Company; also to carry on the business of manufacturers of and dealers in photographic apparatus, &c., chemists, druggists, &c. Registered office, 121 Cheapside, E.C.

ERNEST GRAY (LIMITED).—Capital 500*l.*, in 1*l.* shares. Objects: To carry on the business of chemists and druggists, and to manufacture, buy, sell, and trade in all goods, articles, and things used or required by or dealt in by chemists and druggists. The first subscribers are:—Ernest Gray, 8 Flixborough Terrace, Terry Street, Hull, tanner; Miss Hannah Parkin, 126 Halker Street, Hull; Alfred Brown, 8 Nicholson Street, Hull, drysalter; Harry Wainwright, 43 Blake Street, Hull, tanner; Herbert S. Dunning, 63 Paragon Street, Hull, licensed victualler; William M. Garrick, 3 Beaconsfield Street, Hull, plumber; and John A. Cole, 8 Sefton Terrace, Rosmond Street, Hull, jobmaster. No initial public issue. The first directors are Ernest Gray and Alfred Brown. Registered office, 265 Church Street, Wincoln Lee, Hull.

SECCO FILMS (BRITISH AND COLONIAL) (LIMITED).—A compulsory winding-up order was made in connection with this company before Mr. Justice Wright on March 6.

CHEMISCHE FABRIK HELFENBERG VORM. EUGEN DIETRICH.—The annual report for 1900 states that the gross profit amounts to 165,837*l.* 25*s.*, or 20,321*l.* more than in 1899, out of which it is proposed to pay a dividend of 9 per cent.

SPRATT'S PATENT (LIMITED).—The annual general meeting was held on March 5 at the Cannon Street Hotel. In moving the adoption of the report, Mr. G. B. Batchelor said that the profit on the year's working had been very large, owing to the substantial amounts which the proprietors had enabled the directors to place to reserve, thus providing for the building of new factories and the purchase of new machinery. This had enabled them to carry out the enormous amount of work that had been done in the past year, during which their factories had frequently been working the whole of the twenty-four hours in one day. The profit made, when compared with the share capital, appeared to be very large, but it must be remembered that the share capital by no means represented the whole of the money employed in the business. The ordinary share capital amounted to 150,000*l.*, and there were 50,000*l.* in preference shares and 83,000*l.* in debentures; but the actual amount of money employed in the business exceed 500,000*l.* An interim dividend of 6*s.* a share had already been paid, and the directors now proposed a final dividend of 10*s.* per share, making 16 per cent. for the year, and also a bonus of 5*s.* a share. After placing 60,000*l.* to special reserve, there would remain a balance of 13,814*l.* to be carried forward. The reason the directors proposed to pay a bonus was that they did not wish the distribution to be misleading, and perhaps this would have been the case if a larger dividend had been declared. Mr. Robert Baelz seconded the motion, which was adopted.

PRICE'S PATENT CANDLE (LIMITED).—The report of the directors for 1900 states that, contrary to the expectations entertained a year ago by the directors, the profit for 1900 was unusually large. It amounted to 89,766*l.*, a profit which

was only exceeded in 1899, when the year's profit amounted to 99,484*l.* Adding to the profit 6,871*l.* brought forward (together 96,637*l.*), and deducting the dividend of 18*s.* a share (amounting to 33,750*l.*) paid in September last, there remains 62,887*l.* The directors recommend that 12,500*l.* be, as usual, written off for depreciation of fixed properties and plant; that 33,750*l.* be applied in paying a dividend of 18*s.* a share, the same as last year; that 10,000*l.* be added to the reserve fund, raising it to 75,000*l.*; and that 6,637*l.* be carried forward. In both factories continued progress was made during the year in the improvement of processes and the substitution of modern for obsolete plant. The capital expenditure for 1900 includes the main part (5,132*l.*) of the cost of erecting additional cottages in Bromborough Pool Village, and 500*l.* towards the cost of erecting there a new hospital.

BOSTOCKS (LIMITED).—In the Court of Appeal on March 1, before Lords Justices Rigby, Vaughan Williams, and Stirling, Mr. Neville, K.C., applied *ex parte* in the case of Bostocks (Limited), in which a winding-up order had been made in the County Palatine of Lancaster, for the advancement of the hearing of an appeal against that order. He asked their Lordships to expedite the hearing of the appeal, because before it could come on in its ordinary course the body of the dispute as to whether the company should be wound up voluntarily or compulsorily would be gone, and the appeal would be useless. The point was a short one, and the whole of the evidence was comprised in three affidavits of moderate length. Lord Justice Rigby said the Vice-Chancellor might stay proceedings when the appeal came before him, and in that case there would be no necessity for expediting the appeal. Mr. Neville said he was afraid a stay would only be granted if their Lordships saw their way to taking the appeal on an early day, because otherwise it would be months before it could be heard. The Vice-Chancellor had based his decision upon the view taken by Mr. Justice Farwell, that in a matter of that kind regard should be had to the wishes of creditors. His case was that the petitioning creditor was not prejudiced by the voluntary winding-up, and that there were practically no other creditors. Lord Justice Rigby said he did not think an order ought to be made expediting the appeal. Lords Justices Vaughan Williams and Stirling concurred, and the appeal was therefore dismissed.

DAVID THOM, DOMEIER & CO. (LIMITED).—The third annual report and balance-sheet to December 31 states that the profit from all sources, after making allowance for bad and doubtful debts, expenses, salaries, advertising, bankers' charges, interest, directors' travelling expenses, which, together with the cost of materials, have been higher than in 1899, amounts to 7,464*l.* 11*s.* 10*d.*, out of which 3,309*l.* 13*s.* 9*d.* has been expended upon and written off the property of the company, leaving a balance of 4,154*l.* 18*s.* 1*d.* Adding to this the amount brought forward from last year—1,245*l.* 0*s.* 9*d.*—the balance left is 5,399*l.* 18*s.* 10*d.* The preference dividend to December 31, 1900, amounting to 4,579*l.* 18*s.* 4*d.*, has already been paid. The balance thus left available is 820*l.* 0*s.* 6*d.* Providing out of this a sum of 400*l.*, sufficient to cover directors' fees, auditors' charges, income-tax, &c. (two of the directors, Mr. Ormrod and Mr. Darbishire having announced their intention of taking no fees for their services), there remains a balance to carry forward to the next account of 420*l.* 0*s.* 6*d.* The directors, being anxious to avoid any further increase in the capital account of the company, have transferred 1,000*l.* of the capital expenditure during the past year from the reserve fund, which will be left standing at 1,000*l.* The meeting of the shareholders was held at the Albion Hotel, Manchester, on February 28. There was a large attendance, and Mr. Ormrod (a member of the Board) presided. The Chairman said, in view of the present position of the company, he could not speak so freely as he would like in the presence of the representatives of the Press. He thought that reports of previous meetings of the shareholders had not tended to the welfare of the company, and whilst the directors had not taken it upon themselves to say that reporters should not be present, he would put it to that meeting whether they should be allowed to remain. A vote was then taken, resulting in the decision that the meeting should be private, and the reporters then retired.

Westminster Wisdom.

EARLY CLOSING OF SHOPS.

The Lords' Select Committee appointed to consider this question will meet on Friday, March 8, to appoint a chairman. The Committee consists of the Duke of Marlborough, the Marquis of Salisbury, Earl Stamford, Earl Hardwicke, Earl Romney, Earl Verulam, the Bishop of Winchester, Lord Brassey, and Lord Avebury.

NEW BILLS.

Two new Bills were brought into the House of Commons on March 5, namely:—

Lights on Vehicles: To require vehicles on highways to carry lamps at night, and

Factory and Workshops Act (1878) Amendment: To amend the Act of 1878 by reducing the period of employment on Saturday.

ANALYSTS' MISTAKES.

In the House of Commons, Mr. T. R. Dewar, on March 7, asked the President of the Local Government Board whether his attention has been drawn to the fact that in several prosecutions recently against tradesmen for the alleged sale of adulterated articles, notably at Portsmouth and Hackney, it has been shown that the public analysts on whose statements action has been taken have been guilty of grave mistakes:

And, whether he can take any steps to prevent respectable tradesmen being unjustly summoned upon erroneous certificates?

Mr. Walter Long replied that the certificates were not upheld on reference to the Government laboratory. The circumstances did not appear to show, however, that the analysts were open to blame. He had no power to take steps for the purpose mentioned.

ARSENIC OR LEAD.

Mr. C. T. Ritchie, in answer to the question regarding the similarity of symptoms of lead and arsenical poisoning, referred to before the Arsenical Poisoning Commission, said he had made inquiry into the matter and found that during the last four months of 1900 three cases reported as cases of plumbism were considered by the Medical Inspector of Factories and Workshops to be really cases of arsenical poisoning and were excluded from the returns of lead poisoning. The cases were always carefully scrutinised for mistakes in reporting, and there was no reason to think that there were any other cases not detected.

PROCEDURE OF THE HOUSE.

Mr. Balfour on March 5 moved an amendment to Standing Order 51 so as to place the House in relation to Committees of Ways and Means precisely in the position in which it ordinarily stood with regard to Committee of Supply, by making it impossible on such occasions for private members to move resolutions which entailed what might be totally irrelevant discussion, and producing the utmost uncertainty as to the period at which important business would come on. Sir H. Campbell-Bannerman objected as he did not see any occasion for the restriction; but the motion was carried by a majority of 94 after a discussion.

COOPERS HILL COLLEGE

In the House of Commons on March 5, Lord G. Hamilton, replying to Mr. O'Mara (Kilkenny, S.), said that the visitors who signed the report on Colonel Otley's suggestions for the rearrangement of the course of study at Coopers Hill are, with scarcely an exception, experts of the highest authority upon the technical questions submitted to them. The report is a long and exhaustive one. Colonel Otley has an unbroken experience of twenty-five years' service in India in almost every department of civil-engineering, and the special knowledge thus obtained pre-eminently qualified him to advise as to the special technical training required for the Public Works Department in India.

South African News.

(From our Colonial Correspondents.)

MR. F. J. DAVIES, who was in charge of Lennon's pharmacy during the siege of Mafeking, has opened a business at Caledon, Cape Colony.

DISPENSERS WANTED.—Our Johannesburg correspondent, who has been serving with the R.A.M.C. since the outbreak of the war in South Africa, informs us that there is again as much need and call for good dispensers as during December, 1899.

BUBONIC PLAGUE.—Dr. Gregory, Acting Medical Officer for Cape Colony, has been conducting bacteriological experiments on specimens of the rats obtained from the docks at Cape Town, and has arrived at the conclusion that they have died from bubonic plague. Dr. Edington, the Government bacteriologist, had not published his report when the mail left. Everything is being done to limit the extension of the disease.

BUSINESS CHANGES.—Messrs. Heynes, Mathews & Co. have taken over the business until lately conducted by Mr. A. Davidson, at Kimberley, of which Mr. S. S. Hewitt (lately with Messrs. O. J. Petersen), has taken charge. Mr. Hewitt leaves Cape Town with the good wishes of his numberless friends. Mr. S. Rathouse, who is a refugee from Johannesburg, has opened a well-appointed pharmacy in Caledon Street, Cape Town.

WOUNDED CHEMISTS.—Particulars reach us by the mail to hand this week of the wrecking of a train by dynamite near Greylingstad, in which six civilians were wounded, two of them being chemists. Mr. Charles Martlew, chemist and druggist, Commissioner Street, Johannesburg, and Mr. A. E. Adams, formerly manager for Loewenstein & Co., wholesale chemists, Market Square, Johannesburg. Mr. M. Norman, Australian chemist, of Jeppesstown, was in the same carriage but escaped. Mr. Martlew had been in Durban since October, 1899, Mr. Adams was returning from a trip to Europe, and Mr. Norman had been serving with the forces. All these gentlemen were proceeding to Pretoria on an urgent call, to help the R.A.M.C. with their dispensing in the military hospitals.

Colonial and Foreign News.

HEIDELBERG MEMORIAL.—A committee has been formed for the purpose of promoting a fund to erect a monument at Heidelberg to Bunsen, Kirchhoff, and Helmholtz, whose scientific works are associated with the University. The Chairman of the committee is Dr. Adolf Kussmaul, Emeritus Professor of Medicine in the University of Strassburg.

CANADIAN TRADE WITH GREAT BRITAIN.—Advices from Canada convey the gratifying intelligence that the trade of the Dominion for the fiscal year was the largest on record. Imports amounted to \$189,622,513, or an increase over the previous year of \$26,858,200; and exports amounted to \$191,894,723, being an increase of \$33,000,000. British exports to Canada reached the high figure of \$44,789,730, being an increase of \$7,700,000; while the exports from Canada to Great Britain were valued at \$97,000,000, an increase of nearly \$8,000,000. With respect to trade with the United States, it may be mentioned that there is an increase of \$25,000,000, the imports being \$93,000,000, and the exports \$54,000,000.

A CANADIAN CHANGE.—Mr. C. W. Tinling has bought out the interests of Mr. Archdale Wilson and Mr. H. W. Ralph in the business hitherto carried on under the title of Archdale, Wilson & Co., wholesale druggists, at Hamilton, Ontario, and has turned it into a joint-stock company to be known as the Dominion Drug Company (Limited). The management of the new company is as follows:—Mr. Tinling, for eighteen years a partner in the firm, is President and Manager; Mr. Garden, who has represented the old firm in Northern Ontario for twenty-one years, is Vice-President; Mr. T. A. Henderson, chief clerk in the old firm for seven years, Secretary; while Mr. J. M. Dickson, for sixteen years chief chemist to the firm, Mr. A. McD. Wilson, Mr. Peter Ross, and Mr. W. McA. Stewart, representatives, are the Advisory Board.

North-East Lancashire Dinner.

THE annual dinner of the North-East Lancashire Chemists' Association was held at Blackburn on February 28, Councillor T. Critchley in the chair. Among those present were Messrs. G. T. W. Newsholme (President of the Pharmaceutical Society), Alderman Gibson (Manchester), J. Rymer Young, J. P. (Warrington), and Dr. Ballantyne (Darwen).

The loyal toasts having been honoured, Mr. R. Lord Gifford gave "The President of the Pharmaceutical Society." He remarked that Mr. Newsholme, as the first provincial President of the Society, had justified his selection. He (Mr. Gifford) had reason to know that Mr. Newsholme did not seek the honour, but that it had been thrust upon him. Mr. Newsholme's address at Cardiff was a model of what such addresses ought to be. It was one to which they were not much accustomed, and which furnished evidence of forethought, research, and a knowledge of pharmaceutical history that would repay their earnest attention. Mr. Newsholme's career on the Council had been notable for the earnestness and thoroughness of his educational work. Schemes of organisation were looked upon with a certain amount of suspicion by chemists, who thought that they were not earnest efforts, but make-believes; but Mr. Newsholme's local-organisation scheme was a sound and earnest effort. He thought it might be said of Mr. Newsholme that, while it was not in mortals to command success, he certainly deserved it.

Mr. Newsholme, in reply, said he had not deserved the good words spoken of him by Mr. Gifford, and he held his position more to the good nature of his colleagues than to any ability he might possess. There had been a sort of feeling that the Pharmaceutical Society was more or less a society of London chemists. It was, as they knew, originated by London chemists, and one of the things which induced him to become President was his anxious desire that it should be the Pharmaceutical Society of Great Britain. He deprecated the notion that the local-organisation scheme might become a political organisation. The Pharmaceutical Council was bound to recognise members of Parliament, whether Liberal or Conservative, and, if united, the Pharmaceutical Society could demand more consideration from Parliament than that of the mere handling of scheduled poisons. Chemists ought to have in their own hands the sale of every drug, and at least the compounding of physicians' prescriptions.

Councillor Shorrock then gave the toast of "Our President," and called upon Alderman Gibson to present the following illuminated address to Mr. Critchley:—

To Councillor Thomas Critchley, President of the North-East Lancashire Chemists' Association.

Dear Sir,—We, the members of the North-East Lancashire Chemists' Association, desire to take this opportunity of expressing to you our very high appreciation of your services as our president for the last ten years. During the whole of that period much of your time and labour has been devoted to the interests of our Association with an unselfish zeal and an unflinching energy that have evoked our warmest gratitude and esteem. Your unrivalled experience in the drug trade, extending over fifty years, has made your counsel and advice at all times most helpful and valuable. In the larger sphere of public life and commerce we can with the keenest pleasure and admiration testify to the sterling worth and integrity of your character, and to the high place you occupy in the esteem of your fellow-townsmen. We trust that the health and strength of yourself and Mrs. Critchley may long be preserved, and that your generous sympathy and interest may be vouchsafed to our Association for many years to come.

The address is illuminated on vellum, in the style of the fourteenth century. The text is in fine black letters, the name of the recipient being specially displayed in colours and black and gold. The name of the Association is also prominently displayed. The paragraph initials are boldly drawn in panelled spaces, fully coloured and richly gilded. The arms of the Pharmaceutical Society, fully emblazoned, appear at the head, and the address is contained in an English gold frame.

Alderman Gibson said when looking for great men they

were often apt to turn to the high social scale, but he thought more heroes and greater men were to be found in the rank-and-file of the nation. If they would show him a man who had lived forty or fifty years like his friend Mr. Critchley in the same place amongst the same class of people, and at the end of that period was more admired, respected, looked up to, and honoured than at the beginning, then he would say they had amongst them a great man. No advancement in life, no accumulation of wealth, had allured Mr. Critchley from what he was forty years ago. Many men who had splendid opportunities, but who, to use a common expression, had not "been able to carry corn." That was not so with Mr. Critchley, who had for many years done his best to put a bright gloss upon everything and everybody—(laughter)—but never to gloss over himself. He would be delighted if Mr. Critchley should occupy the position of Chief Magistrate of such an important town as Blackburn. (Cheers.)

The President, in returning thanks, said he came to Blackburn as a poor boy from the country with no ambition to become a chemist, but he became interested in the business, and ultimately started in a small way on his own account. Their hours in those days were from 7 in the morning to 10 in the evening, but he, in conjunction with one or two others, was instrumental in getting them reduced—first by one hour, and afterwards by two. Their Association during the last ten years had done good work. They started in a small way, and had rendered themselves popular by going to other towns and trying to induce other people to follow in their footsteps.

Mr. G. B. Pickworth gave "Our Guests." He said it was their desire that every Association should take as great an interest in the welfare of one another as they did in themselves, and they hoped that when the crisis came and a bill was brought before Parliament it would meet with all the support possible.

Mr. Rymer Young responded in a humorous speech. While appreciating their hospitality, he said, they were a little too thick with their criticism. (Laughter.) He had always understood that the earth was a globe revolving on its own axis, but he was afraid that some people were of opinion that the world was really the North-East Lancashire Chemists' Association revolving by itself. (Laughter.) In advocating that they should all do their level best to find a common centre of union. He contended that in order to accomplish this they would have to compromise something. He could assure them that others besides himself had got tired of going up to London and sitting there talking day and night. It might have gone on till doomsday, but a representative committee was formed, and the result had been a Bill which was open to criticism. They were met by a section who held certain views, but who handsomely gave way in matters upon which they felt strongly. It was only right that the same forbearance should be shown in the country as had exercised in London. They ought not to forget that those in London and other parts of the country were men like themselves, meeting with the same difficulties and oppressed by the same anomalies and the same injustice, and who were just as desirous as they were of doing what was best and right for the chemists as a whole.

Mr. Heaton (Bromley) proposed the toast of "The North-East Lancashire Chemists' Association," to which

Mr. Hindle (the Secretary) replied. He said the Association was not altogether concerned in pharmaceutical politics. They had had before them for a long time the question of establishing pharmacy-classes at the Technical School, and the chemists' apprentices had been, and still were, the backbone of the science side of the school. On five occasions they had carried off the gold medal for general science, and there was now every prospect of classes being formed by means of which their apprentices would be enabled to proceed right from apprenticeship to examination at Bloomsbury Square or York Place without the aid of any intermediate school. He hoped to develop more of the social side of the Association, and it was probable that during the summer they would have a picnic or two, while the younger portion of their community might have two or three cycling-runs. Their list of social meetings might be further enlarged by a visit to some representative pharmaceutical manufacturing-laboratory and a visit to the Corporation gas and electricity works.

Our Town Traveller.

FROM what I have gathered during my journeyings within the past few weeks, the depression in business which characterised the fall of last year and the end of January, 1901, is practically at an end. Traders generally are in a more hopeful frame of mind and great expectations are entertained of record business during the coming year or two. One of my latest calls was made on the ABBEY EFFERVESCENT SALT COMPANY (LIMITED), whose palatial offices in Queen Victoria Street, E.C., give no indication of hard times. Mr. Allen, the manager of the company, had written us a courteous note regarding an error which had been made in the pricing of their salt, and intimated that he had views on

THE CUTTING QUESTION

which might be interesting to us and to our readers.

"I am glad to have the opportunity of exchanging views on this question with the representative of such a well-known journal as THE CHEMIST AND DRUGGIST," was the manager's complimentary greeting. "I beg to assure you of the appreciation of the company of your method of promptly removing any false impression which may have been engendered by the unfortunate error in the pricing of our salt. Suppression of cutting is such a difficult matter that one needs all the help one can obtain."

"Which do you consider the best method of preventing cutting?" I asked.

"Well, that is rather a poser," Mr. Allen replied. "It seems to me that there is no best method; and no one has solved the problem satisfactorily as yet. But I will tell you the extent to which we have gone to stop cutting, and you will doubtless agree with me that all the terms you may make are as naught without the co-operation of the chemists themselves, particularly of those who have acquired a reputation for selling at cash-prices. I think the first step towards enlisting this co-operation is to have maximum and minimum selling-prices of a preparation, to allow for the difference which chemists are expected to make to distinguish between cash and credit charges. We are just now preparing to again circularise the trade, approving a minimum selling-price of 2s. 3d. for Abbey's salt where conditions make it desirable to sell at that figure instead of at the advertised price of 2s. 6d. But this is only the beginning of the plan, and is already followed by many proprietaries listed by the P.A.T.A. and approved by them."

"What do you think of the P.A.T.A., Mr. Allen?" I digressed.

"I believe it is doing some genuinely good work in suppressing cutting. That course being decided upon," continued the manager, "we have the assurance of the largest concerns not to cut below this minimum price, and in every instance the representatives of these larger houses, have shown a unanimous willingness to maintain prices which is extremely gratifying. The trade generally realises that cutting is detrimental to all concerned, and if, instead of having an inflexible selling-price, all manufacturers would but recognise that the allowance made in other branches of trade in the way of a discount for cash purchase applied to them as well, the relations between all interested parties would speedily become more cordial. Common-sense must be the guide in this as in other matters."

"But what means have you of discovering whether your goods are being cut under the minimum price or not?" I queried.

"We adopt a system of private marks," rejoined Mr. Allen, "to discover through which distributing house the goods have been purchased, and when we are after a cutter very hard we adopt this further secret plan."

Here the manager explained a method which, although involving considerable detail, is so ingeniously contrived that a bottle can be traced from the time it leaves their laboratory until it reaches the customer. Naturally the company do not wish their plan to be made public, but from what I can judge it is as infallible and accurate as possible.

"Then you think this will prevent cutting?"

"No; it may not entirely prevent cutting," Mr. Allen admitted, "but it has the effect of minimising it to such an extent as to make it less harmful. The adoption of such a

plan as ours is imperative to prevent cutting, but this, combined with courteous treatment, an occasional personal talk in individual cases, and a firm adherence to one's price-lists and terms, is the most effective means we can think of. But while many manufacturers only make a pretence of preventing cutting, in our case we consider it the maintenance of a principle."

"What is your opinion of other methods that have been tried?"

"Well, there are the rebate systems, the payment of profits at specified periods, &c.; but we think ours less cumbersome, and it is as effectual in our case as anything we could adopt. I never knew but one plan that would positively prevent cutting. This was suggested by an American pharmaceutical organisation, but was never carried out. Briefly, it required every manufacturer to affix a stamp to each package of his preparation, these stamps being issued by the organisation in question at a minimum cost, but as a guarantee from them that it was to have a place on the chemist's shelf. The chemist was not to keep any proprietary article in stock which did not bear this stamp. That plan I consider well-nigh perfect, but in order to ensure its success it was necessary to have the co-operation of an overwhelming majority of the chemists—and this, as you are probably aware, is about as easy to accomplish as it is to believe the millennium has been reached. This only demonstrates, however, that the remedy for the cutting evil lies in the hands of the chemists themselves, and it is on their combined action that the entire abolition of cutting depends."

It is evident from the past record of this company in various parts of the world that they are using the greatest individual efforts to maintain prices. I gleaned, further, that the company have gone to the extent of cutting off supplies entirely from certain houses in the trade who would not fall in with their minimum cutting rule.

FOR THE CHEMIST AND SEEDSMAN.

It is at this season of the year that the suburban customer begins to clamour for seeds wherewith to make his garden-patch in a few months the envy of the neighbourhood. Many chemists in Suburbia, as well as those in more purely country districts, do a respectable business in flower and vegetable seeds, and find the side-line pleasant and profitable. With a view to the guidance of those who contemplate trying this department, as well as for the information of all, I have endeavoured within the past few days to gather some particulars of the seed-selling business. I first interviewed Mr. Goddard Clarke, of POTTER & CLARKE, Artillery Lane, E., and there learned that chemists do not make so much of the seed-business as they might do. The introduction of packed seeds a few years ago caused a tremendous rush, and crippled the bulk-business considerably, but I have an idea that it might pay the chemist even yet to buy in bulk and pack his own penn'orths. Chemists in Wales seem to do this more than in any other part of the country, I was informed, but the packets are handier and are least trouble, and their attractive get-up makes them more popular. The bulk prices vary, of course, according to the season, but there is no notable variation in the price of any class of seed to be discovered this year. The flower-seeds most commonly sold are the asters, carnation, convolvulus, forget-me-nots, godetia, lobelia, lupins, marigolds, mignonette, musk, nasturtiums, nicotiana, pansy, varieties of pea, phlox, poppy, and some others. Amongst vegetable-seeds the favourites are the leeks, lettuces, onions, radishes, beans, and peas. The two latter varieties are always sold in bulk, never packed. The list of sweet and medicinal herbs hitherto issued by Messrs. Potter & Clarke has been considerably augmented this year, and angelica, sage, savory, balm and borage, horehound and hyssop, and other well-known herbs, are now supplemented by the more unfamiliar burnet, cardoon, purslane, rampion, tarragon, and many others. The packed seeds, "Winged Lion" brand, are sold in special counter show-cases with gold lettering, in lots of two gross assorted.

SOUTH AFRICAN SHOPFITTINGS.

While many traders are grumbling about the prolongation of the war and the stagnation in South African business, our ever-hopeful friends Messrs. PHILIP JOSEPHS & SON go on their way serenely, and the morning post brings

its reward in the shape of commissions for shopfittings for some Transvaal town or Natal seaport. A week or two ago a surprise of this kind came in the form of an order from a Pretoria firm of chemists for a large dispensing-counter and screen. The Pretoria chemist, who, between the intervals of attending to his military customers and resisting invasion, had been studying his CHEMIST AND DRUGGIST found there just the thing he wanted to improve his store, and sent particulars direct to Messrs. Philip Josephs & Son, with measurements and orders for it to be despatched forthwith. Before being packed for shipment I inspected the screen and counter, as a natural curiosity made me wonder whether it would be armour-plated or possess any extraordinary points of construction. When I got to the premises at Old Street I was presented to a perfectly orthodox and innocuous article of shop-furniture. The dispensing-counter is made of solid mahogany, and the screen has beautifully finished plate-glass shelves, with mirrors behind; a central sponge-case, beneath a St. Anne's marble slab, supporting a mirror. Evidently the inhabitants of Pretoria appreciate good-looking shops.

TYPEWRITERS.

Writing by machinery has become no prevalent of recent years that present-day commercial firms who do not possess a typewriter are considered behind the times. Truly "the click of the typewriter is strong in the land," and its advent has facilitated business in many ways. If pharmacists could only prevail upon some of their physician patrons to learn typewriting or to employ a typewriter for writing out their prescriptions, who knows how many hours of anxiety and periods of heartburning might be obviated to individual members of the craft? Reading a prescription under such circumstances would no longer be, as it is now in many cases, a puzzle and a hazardous undertaking, but a pleasure and a



surety. Although the idea may sound Utopian it is far from being so, for on a recent visit to the establishment of the Yost Typewriting Company (Limited), at 50 Holborn Viaduct, E.C., I saw machines which may be readily adapted to typing prescriptions in the orthodox manner. The Yost machine differs from other typewriters in having no ribbon, as it gets its ink-supply from a circular pad which allows of the type striking directly on to the paper. The types when not in action rest on the inked pad, and are thereby always evenly inked. An expert representative of the company, who explained all the ramifications of the machine, showed me that the centre guide through which each type, is conducted to the printing-point. This is another feature of the machine, as by the introduction of this guide the alignment is always perfect, and Yost typewriting is thus void of irregularities. That the Yost is a popular machine there can be no question, for the company claim to hold the world's record order for typewriters. The picture herewith represents the window (and footpath in front of the window) of the Yost offices filled with a single order for 156 machines

given by the Indian Government. Numerous gold medals are also credited to the company for the excellence of their goods, the latest award being at the Paris Exhibition, 1900. There are ten specimens of type to which the Yost machine may be adapted, varying in size from the "elite" type greatly favoured by literary gentlemen to the bold, clear, and distinct characters used by public speakers or clergymen who have to read their sermons in the midst of a dim religious gloom. Besides these there are the ordinary accented letters, and special signs may be fitted on of almost any kind, including, as I said before, those of the apothecaries' weights. The machine may also be fitted with Hebrew, Russian and Hindustani type, so it is evident that its use may be world-wide.

SOAP-SPECIALISM.

Just over Bow Bridge, the traveller eastwards encounters Cook Street. Proceeding along Cook Street he will find, as I did last week, the extensive range of buildings with a frontage to the River Lea comprising the domain of the Soap-Specialists, Messrs. EDWARD COOK & Co. (LIMITED). Under the guidance of Mr. T. A. Cook I inspected building after building—I am quite unable to say how many there are altogether—and was initiated into the art and mystery of soap-making, from the entrance of the crude product in barrels to the packing of the "Savon de Luxe" in elegant cartons. I first gazed into the depths of boiling vats, capable of holding 100 tons of soap. I watched the boiled soap being pumped out by steam pumps and decanted into upright cooling frames. I saw the block of soap, after it had been cooled and released from the frame, being cut into slabs by hand, and afterwards into bars by machinery. On another floor soft-soap was being tinned in quantities varying from the humble (but lavish) penn'orth to the 7-lb. tin. In another department lightning-fingered youths were wrapping Cook's "Lightning Cleanser." The demand for the latter is increasing so rapidly that a more extensive department for this line is in contemplation. In the toilet-soap and stamped-soap room I encountered all the well-known soap-specialities of the firm, and many other proprietary soaps of known fame, in various stages of production. A neat and effective hot-air drying-cupboard here showed the advance in drying made of recent years. Soaps that took six hours to dry by the old method can be finished now in twenty minutes by Messrs. Cook's apparatus. In the packing and delivery department, which is on the ground floor of the same building, there are generally about one thousand tons of soap, in stamped and marked boxes, ready to go out. A branch railway line runs by the door of this department, and trucks may be laden for rail, or barges for transport by water, by means of the large cranes just outside. Another building of two floors is devoted almost entirely to the manufacture of soft soap and blue-mottled soap. A large trade in the latter article is done with the Cape. The "Lightning" blue-mottled soap, Mr. Cook assured me, had been found very efficacious in the destruction of locusts, and large orders are expected from the Cape Government. The engine-sheds, fitters' shop, blacksmiths' forge, and the timber-yard (containing a big supply of Swedish box-wood), having been reviewed, we watched the milling of toilet-soaps. The pure-soap base is first shredded, then coloured and put into a mill, consisting of two granite rollers moving at unequal rates of speed. The soap comes out in fine, even ribbons, which are afterwards compressed into cakes and stamped. The ingenious method of "needleing" the name or design on a cake of soap, whereby the design persists until the last shred of soap has been used, is, like most ingenious things, exceedingly simple. By means of a specially constructed machine the soap-tablet is immersed in the colour desired for printing. While in the colour two sets of needles, arranged to represent the required design, pierce the tablet in each side, meeting in the centre. As the needles are withdrawn a vacuum is created, which is filled by the colour, and the design remains after the tablet has been washed clean from outside colouring. The stables, which shelter forty-eight horses; the "ironmonger's shop," a room containing supplies of every possible miscellaneous article that may be required in such an extensive establishment; the glycerin plant, and a stock of about 2,000 lb. worth of essential oils having been seen, we visited Mr. Hall in his laboratory, and wound up with a review of the toilet specialities in the showroom.

Round the South African Coast.

A representative of "The Chemist and Druggist" started from Cape Town on January 3 for a tour eastwards, and the record of his experiences has come to us since in instalments of "copy" which we subjoin as a connected narrative. It deals with the trade as he found it in the principal business centres.

CAPE TOWN.

the headquarters of the drug-trade in South Africa, is the most cosmopolitan city in Greater Britain. Girdled in horseshoe form by Table Mountain, with but two roads of entrance or exit, the one leading northward to everywhere, and the other south to exactly nowhere; with machine and 4·7 guns looking askance down on her and the Boer prisoners within her gates: the cynosure of trade, finance, and news just now: the veritable Babel of the South. Her enemies dub her the "City of Stinks," but an effort is being made to polish her up a bit, and when finished no more beautiful city will greet the eye of the traveller. So her friends say.

To-day (January 2, 1901) all Cape Town basks. The heat overpowers you and everything. Business-men pass you by wearing massive sun-helmets or smasher hats, and dive periodically into *cafés* or bars to sip iced somethings. Round the corner, in the main street, comes an electric car. It bears down on you without any visible means of propulsion, gong ringing furiously—the only thing, living or otherwise, that is not overcome by the heat, and which is in a hurry, and wants everybody to know it.

Apart from its unique position as centre of attraction of the British Empire owing to the war, Cape Town is not a featureless place by any means. Its extraordinary buildings owe allegiance to no particular kind of architecture—here a skyscraper with a one-storey Cape-Dutch store as its immediate neighbour; traction-engines thunder and shriek their way along the streets; and electric cars offer the best, and the most costly, service of any British city. From the deck of a liner in the Bay the city gives one the impression that she is hanging on to the slopes of Table Mountain for dear life. And so she is. If the sea decides some day to take back its own, little of newer Cape Town will be left.

Surrounded by mountains, one would surmise that no great wind could ever trouble Cape Town otherwise than from the sea. Yet during the summer months of the year a wind called "South-Easter" spreads a white cloud over the mountain-top like a table-cloth, which hurls itself down into space below, accompanied by a wind that plays with kerosine tins and bricks as if they were mere paper bags. Old residents will tell you that were it not for the South-Easter the place would not be fit to live in. In England or America it would be written up as the greatest gale for years. Here it occurs so often that nobody but a stranger would think of passing remarks about it.

Table Bay is the first port of call for ocean-going steamers. Cargo-steamers do, of course, ply direct to other ports, but Cape Town is the front door through which you must enter to see what there is to see in South Africa. To those who anticipate finding a regular up-to-date port in Table Bay a disappointment is in store. Dock-accommodation there is for all the shipping likely to use the port for several years to come, but it is almost painful to witness the primitive methods in vogue for effectually handling merchandise, more suggestive of Portuguese than British ideas.

The merchants of Cape Town are watching events with feverish anxiety lest they should be outwitted after the war by their rivals round the coast. Some of them predict that business will have a regular boom immediately peace is concluded; while others—the more sensible ones, perhaps—shake their heads, and frankly say that it is difficult to map out the future with any certainty. Both sides are carrying larger stocks than ever they did before—a fact for reflection, anyway. Personally, I am of the opinion that trade

will be very good when the country settles down, and the pacification ideas of the Imperial authorities have had time to bear fruit; but I am steadfastly sceptical that any boom is to take place in the near future.

South Africa is a continent that has hitherto constantly defeated our expectations. Raids, wars with natives, famine, political unrest, disease, and the war now being waged have disturbed her within a decade. No wonder South Africans ask themselves seriously whether an end to their troubles is imminent. Micawber-like, they have been waiting for something to turn up to relieve them of the many worries of life over which a nation can exercise control. "Will all go well after the war?" is a question that must still remain unanswered.

There are not as many whites in all South Africa, under normal conditions, as you find in some of the world's best cities; but this is a country of enormous wealth, with possibilities in front of it second, perhaps, to none in the world. Still, there is nothing to do but wait—wait till the war is over, and Britain sends out her sons and daughters to make the place what it should have been long ago—one of the brightest jewels of the Empire.

PORT ELIZABETH.

When I awoke this morning the steamer was riding at anchor in the troubled waters of Algoa Bay. There, profiled along its shores is the most business of all business-centres on the coast of South Africa—Port Elizabeth.

Notwithstanding the warning I got from the ship's officer I elected to land, and I was promptly placed in a basket-arrangement and slung over to the tug. One fellow-traveller assured me that the sea was running very high, while a drug-traveller representing a Midland house explained it away as being nothing much—quite the usual thing on the African coast. All I know is that I am now the poorer by a suit of clothes: so were many others.

Messrs. C. E. Gardner & Co.'s is the first chemist's establishment to greet the visitor. This firm are somewhat handicapped in the conduct of their business. Until their new premises are ready they have to be content with an office and retail-store here, another building over the way, and yet another in a third street. A stock scattered about the town thus is exasperating to say the least, but "Al zal rijt komen," as they say at the Cape.

Business at Port Elizabeth is bad—very bad. Everybody says so, and what everybody says must be true. "Business, sir, business has gone to pot. Pretty near everything here is military. We shall be glad when the war is over." So spoke a prominent Bayonian to me. It seemed that war was the sole subject for discussion, so I had a "cab round" and viewed the drug-stores.

There was Messrs. Willet & Co.'s headquarters on the Hill, with several stores of the same name in various parts of the town. Mr. Willet made anxious inquiries as to the state of the Western province, then referred to the war and state of the country generally.

Further along at the bottom of the Hill is a little drug-store whose eccentric proprietor is trying to solve the "patent" question. He has managed to satisfy himself that he is well on the way too. A neighbouring knight of the pestle expostulated satirically, but just what he really said must not be repeated to the profane—he knows his own mind and speaks it. Needless to say I refrained from interviewing the man who has set his hand to settle the question that vexes the world. At any rate, I understand that he positively refuses to look at the *C. & D.* on principle.



MR. C. E. GARDNER.

Proceeding, I dropped in at Lennons' to see Mr. A. Walsh, the company's resident director, who is also Government



MR. A. WALSH.

representative on the Colonial Pharmacy Board. It goes without saying that Mr. Walsh is an authority on South African trade, and he cherishes great ideas as to the future of Port Elizabeth from a trade point of view. He even goes so far as to make friendly references to the climate, but while I am ready to admit the business-ability of the citizens of Port Elizabeth, I cannot say too much for the climate. My impressions may, of course, be accounted for owing to my not having viewed the place under favourable conditions.

After visiting Lennons'

I began to appreciate the position in general. There were packages—stacks of them—ready for shipment up-country—only waiting for the wherewithal to remove them. The military authorities located at inland points issue permits for the chemist or storekeeper in their districts; in turn the railway refuses the goods, on the subterfuge that the military authorities want all the trucks. It may be true; it may not be. The military authorities have all along acted in such an arbitrary manner as not even to gain for themselves the benefit of the doubt now. Take Lennons as an example. This company have vast interests at stake in the Transvaal. When they made application for permission to send a representative through to Johannesburg, the conditions imposed were of so extraordinary a character as to effectually har the way. Yet foreigners leave every day for the coast on a health-trip and return to the Rand. The other day they allowed an English drug-traveller through, and his business was by no means plain to the refugee-chemist on the coast.

I mention this simply to illustrate that all in all an Englishman's lot in Africa just now is not a happy one—indeed, I fancy that a dirty German Jew or Portuguese from Delagoa Bay demands and gets more respect than the average British subject.

You may forget that you are an Englishman in England, but you can never forget it in South Africa. That is very true to-day, and East London sympathises with her rival and neighbour.

DURBAN.

I had another dose of the basket-treatment to-day (January 20). Like most things, you get used to it, and it is my opinion that no liver-regulator has yet been invented that could shake one up so. Leaving a liner thus is hardly dignified, but no doubt it is all right.

Natal is pretty. I looked with keen satisfaction on the lovely green hills and Durban Harbour. The greenery came as a pleasant relief after the parched-up country such as one finds at the Cape.

Exactly where to go and what to do I knew not, so I chartered a "ricksha," and, remembering that the best way to see London was from the top of a 'bus, started to view the port of Durban on similar principles.

In Cape Colony they look upon Natal more or less as a young upstart. Natal thunders derisions, picturing the Cape as an object for gross contempt. The expression is general throughout Natal. Of course they do not all tell you so directly; at the same time, the fact is patent to anyone who takes the pains to observe. For my part I am certain that the Cape can teach Natal and her 60,000 normal white population nothing. There is even a faint touch of the American hustler here. Man for man, Natal has done more in the interests of the State than any other colony I know of.

Come to Natal; travel over her railroad, the best-built in South Africa, and the most extraordinary one I ever travelled over (the train is constantly turning corners); look at the public buildings; call in at the pharmacies; and last, but not

least, remember what she has done during the war. But Natal knows well what she can do, and is proud of it.

The Customs official who examined my baggage expressed the hope that my journey would be a pleasant one. As to Natal, he was inclined to think that the whole country was highly interesting and well worth coming to see. The railroad-car conductor apologised most profusely owing to his inability to furnish me with a bed on board the train. "You see, sir," he went on, "the department handed them over for the wounded." Trust Natal to look after the stranger within her gates. And, mind you, this is only a sample of Natal. There can be nothing wrong with a country whose minor officials can afford to extend such attention.

In pharmacy, as in all else, Natal—Durban at least—can hold her own. From the 'ricksha I observed a pretty little place in Gardiner Street, owned by Mr. S. K. Elgie. I knew Mr. Elgie was a member of the Natal Pharmacy Board, but I did not know him personally, so I called. At the next corner—the best position in Durban, the assistant told me—is the establishment of Messrs. Reed & Champion. Mr. Champion takes a prominent part in Natal's pharmaceutical affairs. He practically got the Pharmacy Act for the colony, and has been President of the Colonial Society and member of the

President Pharmaceutical Society of Natal. Pharmacy Board.

Over the way, almost next door to each other, are the pharmacies of Messrs. Lennon (Limited), Stranack & Williams, and Mr. H. J. Brereton.

Mr. Brereton owns what is probably the finest pharmacy in South Africa. On the right on entering there is a soda or cool-drinks counter—not so elaborate as the average American is; nevertheless it looked nice, and I can vouch for the quality of the drinks. Further along on the same side is the photographic retail, while the opposite space is utilised for the dispensing and general counter. At the back are offices, consultation and waiting rooms for the use of medical men; and above and behind these are wholesale premises covering, or intended to cover when finished, 12,425 square feet.

At the Cape Dutch medicines are put up anyhow. There they will tell you that the Dutch appreciate lack of attention to details. In Natal one firm at least explodes the idea, by putting up their Dutch medicines not only better than their friends in the South, but at a lower price.

In Natal drug-circles the general impression is that the State has sold itself to the Cape by joining the Customs Union. It is considered that however much the sugar and tea industries may benefit—which at the best cannot be much—it was impolitic for Natal to enter into the arrangement. I would rather not express an opinion seeing the feeling at present existing: it is a step towards the federation of all South Africa, though but a small one.

Natal wholesale druggists will make a very decided bid for the Transvaal trade after the war. The larger firms own their own bond attached to their premises. Here they store patents and similar goods, on which 20 per cent. duty is levied. It pays to store when intended for local consumption. The man in Johannesburg will find it pays him to purchase in Natal as against the Cape, for the simple reason that there is little or no delay—and, above all, the goods go overberg in bond. Another thing: view Natal's geographical position, and you will observe that she stands, as regards distance, second only to Delagoa Bay, and Natal wholesale druggists have nothing to fear from that quarter.

MR. G. A. CHAMPION,
President Pharmaceutical Society of Natal.

Reviews.

ABC Automatic Balancing-charts. By J. THORNTON. Foolscap. 1s. London: Macmillan & Co. (Limited).

A USEFUL set of three automatic balancing-charts providing for a weekly summary, trade account, and balance-sheet. It is published as a supplement to Thornton's "Book-keeping for Business Men," and as such should prove of use to chemists opening a business.

Analytical Tables for Complex Inorganic Mixtures. Arranged by F. E. THOMPSON, A.R.C.S., F.C.S. $8\frac{1}{2} \times 7\frac{1}{2}$. Pp. 7. 1s. 6d. (by post 1s. 7d.). Stafford: The Chronicle Office.

THE tables given are for preliminary examination in the dry way, examination in the wet way for metals, eight group-tables, examination for acids, and confirmatory tests for acids. The tables are well arranged, and, as far as we have followed them, quite accurate. They should be useful to those Students' Corner men who at present follow no fixed plan in their analytical work.

Sell's Directory of Registered Telegraphic Addresses, 1901. By HENRY SELL, 167 Fleet Street, E.C. Pp. 2,050.

THIS admirably compiled work not only contains a London and provincial list of large commercial houses and buyers, with their telegraphic addresses, but also a complete alphabetical list of the telegraphic addresses themselves. There is also embodied an excellent classified trades' directory, full postal information, and as a new feature in the 1901 Directory will be found the names of all the British Consuls abroad, classified under the names of towns at which they reside. A special addendum to the work is the issue of quarterly supplements, containing all new registrations, cancellations, and other alterations effected at the Post Office each quarter, bringing the information always up to date during the year. A really useful map in colours of South Africa, showing the economic position and productions of that country, is issued with the Directory, which is handsomely bound in red cloth boards.

The Microscopy of the More Commonly Occurring Starches. By HUGH GALT, M.B., C.M., &c. Illustrated by 22 original microphotographs. $7\frac{3}{8} \times 4\frac{3}{4}$. Pp. 108. 3s. 6d. London: Baillière, Tindall & Cox.

THIS work, whilst not laying claim to being an exhaustive treatise on the identification of the common starches, is the best book on the subject we know of. A brief introduction is followed by details of the process by which the excellent microphotographs given were obtained. The method of measurement of the grains by the micrometer scale is then briefly explained, whilst subsequent chapters are devoted to the starches yielded by the potato, rye, rice, oat, maize, pea, sago, tapioca, wheat, barley, Bermuda arrow-root, Tous-les-mois, and haricot bean. The microphotographs are well shown on account of the excellent paper used for printing the blocks.

The Manufacture of Lake Pigments from Artificial Colours. By FRANCIS H. JENNISON, F.I.C., F.C.S. Sixteen plates. $8\frac{3}{4} \times 5\frac{1}{2}$. Pp. 136. 7s. 6d. net. Scott, Greenwood & Co.

WE have been asked on previous occasions to recommend a book on lake pigments, but have had to confess that a practical work on the subject did not exist. The want is supplied by Mr. Jennison's book, which deals with those pigments precipitated from artificial colouring-matters as insoluble compounds. The intricate chemistry of the production of artificial dye-stuffs is avoided, but an attempt is made to concisely explain the chemical nature of the colours dealt with. The practical portion of the volume is the one which will especially commend itself, as that is the part of the subject which most readers would buy the book for. The final chapter is a useful one on matching and testing lake pigments. The illustrations are strips of paper coloured with the actual lakes produced by the processes or modifications of the processes enumerated in the book, and show the influence of, for instance, varying the order of mixing.

Bookkeeping for Business Men. By J. Thornton and S. W. THORNTON. 7×5 . Pp. 186. 3s. 6d. London, 1900: Macmillan & Co. (Limited). New York: Macmillan Company.

THIS is a very handy little book, giving a clear exposition of bookkeeping excellently illustrated with examples and charts; the object of the author being to explain both the principle and application with sufficient clearness and fulness to enable a young trader to construct, keep, and balance a set of books suited to his own business. The explanatory matter, apart from the charts and examples, is to the point, and we think the author has attained his object by making his model system sufficiently elastic to meet the requirements of traders. The first four chapters of the book deal with double entry, followed by a discussion on the choice of business. The reader and Thornton then enter into partnership and open the necessary set of books. The subject-matter of the remainder of the volume is planned to show the various kinds of difficulties met with in bookkeeping, and how to provide for them.

The Failure of Surgery in Cancer. By S. KENNEDY, L.C.R.P., L.R.C.S., Ed. $7\frac{1}{2} \times 5$. Pp. 160. 1s. London, 1900: Simpkin.

THE title of this book is somewhat misleading. "A Defence of the Mattei Remedies" would have been more appropriate. True, the first chapter of twenty-five pages gives the recorded opinions of eminent medical men as to the inefficiency of surgical operations in the treatment of cancer, but all the remaining portion of the work is devoted to an eulogy of the methods of "the immortal Hahnemann," and a plea for a prolonged trial of the remedies of Count Mattei. The history of the trial cancer-cases recorded by Mr. Stead in the *Review of Reviews* is retold, and the results asserted to be favourable in spite of the committee's decision. The analysis of Mattei's Electricities by Mr. Stokes is denounced *in extenso*, and cases cited tending to prove the infallibility of the Mattei treatment, and the reasons which induced the author to become an "electro-homeopath." The work is the production of a vigorous personality, but we anticipate that there may be some ground for the "fear" which is expressed by the author in his preface, "that I shall be abused in some quarters for issuing a book like this, and be accused of all manner of unworthy motives."

The Case-law of the Workmen's Compensation Act, 1897. By R. M. MINTON-SENHOUSE, of the Inner Temple and Oxford Circuit, Barrister-at-Law. Second edition. $8\frac{1}{4} \times 5\frac{1}{4}$. Pp. 128. 3s. 6d. net. London, 1900: Effingham Wilson and Sweet & Maxwell (Limited).

THIS book is intended to supplement Part III. of the author's "Accidents to Workmen." Nothing so worries employers of workmen than the Act with which it deals; they frequently "don't know where they are," and it does relieve them to learn that lawyers are in the same quandary. The Court of Appeal is (at the time of writing) spending day after day in trying to reduce the chaos of Lower Court decisions to something like order. Mr. Minton-Senhouse shows that much of this is a legacy of hasty legislation, and the Act of last year is a particularly good example of this, for it is so framed that under certain conditions, if one's domestic servant falls in one's garden and injures herself, one may have to pay her half her average weekly earnings for the remainder of her life, although the Act is intended merely to extend the benefits of the 1897 Act to workmen in agriculture. "Accidents to Workmen" (15s.) is used in the Courts as a guide by the Judges; Lord Justice Henn Collins commends it, and its submissions have been discussed by the House of Lords. Employers of labour may well begin with the supplement before us. It will give them the best information—*i.e.*, that based upon decisions. The author has the gift of extraordinary lucidity in stating the cases.

Golden Rules of Skin Practice. By DAVID WALSH, M.D. Edinb. "Golden Rules" Series No. viii. $4\frac{3}{8} \times 2\frac{3}{8}$. Pp. 102. 1s. Bristol: J. Wright & Co.

THE salient points in skin-diseases are briefly set forth in a manner calculated to form a framework of the principles on which skin-diseases are treated. After expounding the

general characters and treatment, the author gives rules on each skin-disease *seriatim*—in *aene vulgaris*, for instance, twelve rules are given and the following ointment and mixture prescribed:—

Sulphuris sublim.	...	...	gr. xx.
Ung. aquae rosae	...	...	ʒiv.
Petrolati	...	...	ʒiv.

M. Ft. ung.

Apply at night, and wash off with warm water in the morning.

Mag. sulph.	...	...	ʒj.
Ferri sulph.	...	...	gr. j.
Ac. sulph. aromat.	...	...	ʒiv.
Aq. menth. pip. ad	...	...	ʒj.

M. Ft. mist. Mitte tales ʒvj.

One-sixth to be taken in a tumbler of water before breakfast.

This extract will suffice to show the useful and practical nature of the little book.

Nouveau Formulaire des Spécialités Pharmaceutiques pour 1900: Composition, Indications, Thérapeutiques, Mode d'Emploi, et Doses à l'Usage des Médecins. Par le Dr. M. GAUTIER et F. RENAULT. 6½ × 4. Pp. 372. 3f. Paris: Baillière et fils, 19 rue Hautefeuille.

THE first part of this Formulaire gives the approximate composition of most of the numerous French pharmaceutical preparations arranged under the names of the drugs. The second part is a therapeutic index in which the specialties indicated for the various diseases are mentioned; while the third part comprises an index to the book, and the addresses of the manufacturers of the pharmaceutical preparations. The book is designed to help physicians to choose a suitable form in which to prescribe particular medicines, but to English pharmacists its chief use will be to identify the makers of out-of-the-way French specialties.

Quantitative Chemical Analysis. Adapted for Use in the Laboratories of Colleges and Schools. By FRANK CLOWES, D.Sc. Lond., and J. BERNARD COLEMAN, A.R.C.Sc. Dublin. Fifth Edition. 7¼ × 4¾. Pp. 592. 10s. London: J. & A. Churchill.

THIS work has for years been a favourite with students, and will remain so as long as the revision is done as well as it is in the present edition. The book is divided into seven parts, with an appendix containing special information on melting-point determination, filtration, ignition of precipitates, a new form of condenser, and descriptions of new analytical processes. Part I. deals with general processes; II., simple gravimetric estimations; III., volumetric analysis; IV., general quantitative analysis; V., volumetric estimation of gases; VI., tables of typical analyses and constants; and VII., of the preparation of gases, use of compressed gases, and distillation of water. The indices include one of processes of separation.

Inorganic General, Medical, and Pharmaceutical Chemistry. By OSCAR OLDBERG, Ph.D. 9 × 6. 2 vols. Pp. 522. 65s. 140 illustrations. Chicago, 1900: Chicago Medical Book Company. \$7.

THESE two volumes form an imposing-looking work. We venture to express regret, however, that the author has not displayed greater originality in the selection of a title, for, although the order of the words stands as above on the title-page, the title on the cover is identical with that of Atfield's well-known book, except that it begins with the word "Inorganic"; and even this difference is only partially justified, since cyanides, acetates, oxalates, tartrates, citrates, lactates, salicylates, &c., are discussed in it, although alkaloids have been omitted. Vol. I. is designated on the cover as "Theoretical and Descriptive," while Vol. II. is a "Laboratory Manual." We are sorry to regard the former as a most disappointing book, and to express the hope that pharmaceutical students on this side of the Atlantic may never be required to study chemistry in the way in which the subject is here presented. Broadly stated, we object to the *ex cathedra* style of statement employed throughout the volume: to chemical facts being subordinated, as we here find them, to chemical definition, theory, and system; and

to the writing of chemical equations being made to appear as an aim, rather than as an aid, in chemical study and investigation.

Let us give some examples to partially justify this criticism. On page 4, after the dogmatic statement that "All matter consists of indivisible and therefore undecomposable particles called atoms," the reader is told that "There are as many distinct elements as there are different kinds of atoms." And again, on page 18, after the still more dogmatic statements that "the existence of absolutely indivisible and therefore undecomposable particles of matter called atoms is universally recognised," and that "all matter is composed of atoms," he is told that "as nearly eighty kinds of atoms are at present known, there are nearly eighty known chemical elements!" Almost at the outset, moreover, the student is confronted with symbols which, at first at least, he is quite unprepared to understand; and throughout the volume he is haunted by valency, bonds, atomic polarity, graphic formulæ for inorganic substances (which are sometimes of fearful and wonderful build), and equations. Valency, bonds, and the writing of equations in particular, are dominating considerations, and (to the exclusion of far more useful matter) attain a prominence and importance rarely met with nowadays except in the smaller "cram" books. The general unsatisfactoriness of the attitude frequently adopted by the author in looking at chemical matters is well illustrated by the following quotation (page 226):—

The correct prognosis of chemical reactions is generally practicable from a thorough knowledge of the laws of chemical composition and decomposition, and from the known influence of physical conditions upon the direction and extent of chemical action. . . . But it is sometimes impossible to predict with certainty from theory what products will be formed from the factors brought into reaction upon each other, and in all such cases the known results of experience can be the only guide.

This attitude we unhesitatingly pronounce to be wholly unscientific and, to the beginner most of all, absolutely misleading.

We disagree with the author in respect to many points in his nomenclature—as, for example, in the use word "dissociation" instead of "decomposition," and in the restriction of the term "synthesis" to the "direct union of two or more elements into one kind of compound molecules, or the rearrangement of the atoms of two or more kinds of molecules into new molecules of but one kind" (page 194). We cannot sufficiently deprecate the placing before the beginner of such astounding statements as the following:—"Chlorine has four normal hydroxides—namely, ClOH, Cl(OH)₂, Cl(OH)₃, and Cl(OH)₄." We do not know what the author means by a "smattering noise" (page 29) nor by the "fulmination" that is said to occur when the heat produced by the action of "chromic acid" upon alcohol "vaporizes another portion of the alcohol and ignites the vapor" (page 30). We notice that the word "cations" (as is very commonly the case) is misspelled "cathions," and venture to object lest this spelling should become general. From their respective derivations, "cathode" should, while "cation" should not, have an "h" in the middle.

Turning to Vol. II., we have difficulty in realising that the authorship is the same. About one-third of the volume is devoted to a really useful description of laboratory appliances, and of operations, mainly on the experimental scale. The remainder describes the preparation of about 500 chemical substances, the majority of which are inorganic compounds. We have not attempted to examine these descriptions exhaustively, but we have turned up the directions for numerous typical substances, and have found these clearly and concisely given, and highly practical. We fancy that few teachers would be inclined to use the volume for teaching-purposes except for advanced students, but as a guide and reference book for the latter (and for teachers too) with respect to the making of inorganic preparations, it seems to fill a want not met by any book in English with which we are acquainted.

Although some reactions of analytical importance are given in the very short descriptive sections devoted to the various metals, &c., in Vol. I., the work as a whole does not attempt to give any systematic guidance in inorganic analysis. The two volumes may be purchased separately.

Pharmacy in India.

By GEORGE CECIL.*

IN India the chemist's shop plays, if anything, a more important part than in Great Britain and other civilised countries; for the exile appears to be cursed with more than his fair share of the ills to which the flesh is heir. In addition to the ordinary illnesses of everyday life, fever and ague are common occurrences, whilst cholera and plague render themselves obnoxiously *en évidence*. The chemist's wares are thus in constant demand, and, in addition to the recognised pharmaceutical establishments, the emporiums devoted to the sale of general merchandise stock chemical concoctions and remedies, reliable and otherwise, of all descriptions. In addition to such establishments as Messrs. Scott, Thompson & Co., Smith, Stanistreet & Co., and Bathgate & Co. (of Calcutta), Kemp's, Phillips & Co., Treacher & Co., and Bertie-Smith & Co. (of Bombay), Murray & Co. and Peake, Allen & Co. (of Lucknow), Hoskins & Co. and Simmonds & Co. (of Meerut), Pearson & Co. (of Secunderabad), Abid & Co. (of Hyderabad), and Wilson & Co. (of Rawalpindi), Kurachee, Madras, Lahore, Benares, Simla, Mussoorie,



THE EURASIAN CHEMIST.

Naini Tal, and Poonah are also provided with pharmaceutical establishments, essentially English. There are also innumerable Eurasian jacks-of-all-trades, who entitle themselves chemists; whilst there exist a number of Parsee and native shops in which pharmaceutical goods are stocked. At the Anglo-Indian establishments—to be found in Calcutta and elsewhere—the contents of the bottles and drawers are much the same as in any civilised country, and the manager and assistants handling the various drugs and powders are generally qualified men. But in the Eurasian establishments so happy a state of things does not prevail. In the first place, the Eurasian is wanting in intelligence—and this description lets him down lightly. In the second place, he is careless and "slack" to the seventh place of decimals, although there are exceptions who exist but to prove the rule. The Eurasian chemist does not aim at making a fortune, and his charges are, therefore, strictly moderate.

The Parsee element is largely represented in the Indian drug-trade. Bombay, Poonah, Ahmedabad, Belgaum, Lahore, Rawalpindi, and elsewhere, are replete with Jeejeebhoys, Damjeebhoys, Jamsetjees, Chuckerbutties, Jamasjees, and Eduljiis, coupled with the mystic words "& Co." They do not, as a rule, prescribe, nor do they make a practice of dispensing prescriptions; but of homoeopathic medicines of English, French, and American manufacture, they possess an unlimited stock. It must be noted that the stock is occasionally of a somewhat flyblown appearance.

The native establishments exist in their hundreds, and rejoice in such fancy names and appellations as "The Pharmacy," "Medical Hall," and "European Chemist." They are usually owned and directed by a "Baboo Doctor"—*i.e.*, a native who has passed an examination in medicine. Sometimes he cures; occasionally he varies the performance.

A word as to the European chemists' customers. Officers, members of the Indian Civil Service—comprising judges, "collectors," magistrates, "commissioners," and "joint-magistrates," "opium *wallahs*," police superintendents, merchants, engineers of the Canals and Public Works Departments, chaplains, officials of the Educational Department—and a certain number of Eurasians and natives, patronise him. With the exception of officers in British regiments, he frequently finds his customers endeavouring to force him to reduce his prices by quoting those existing in native and Parsee establishments. The wife of the Inspector-General of Police—a

dignitary who receives as his official pay some 2,000*l.* a year, *plus* pickings—should she desire a bottle of bay-rum, will thus conduct the purchase:—

The Wife of the I.G.P.: "I want a bottle of bay-rum."

The Chemist: "Two rupees, please."

The Wife of the I.G.P.: "Nonsense; it only costs 2*r.* at the stores, and the bottles are much larger. If you want us to deal with you your prices must be lowered." No business done.

The District Superintendent of Police, when on business bent, distinctly has an eye to the main chance. Thus:—

The D.S.P.: "I want 100 lbs. of disinfectant, please, for the police lines. We've had ten plague-cases there. And I want a pair of hair-brushes and a tin of carbolic tooth-powder for myself. You can (in a stage whisper) put 'em all in the same bill—you know which!"

The "opium agent," on ordering 100*r.* worth of chemical goods and appliances, will intimate to the Parsee proprietor that a vacancy in his department will shortly occur. Should that Parsee's son and heir apply for the billet, it is not improbable that he will be the selected candidate; but it does not necessarily follow that the account, on being presented by the head of the paternal establishment, will be paid.

The wife of Captain Grab, of the Commissariat Department, is in want of a cake of soap; she orders the dog-cart (presented to her spouse by the local army-boot contractor), and drives in state to the establishment of Messrs. Pestle & Mortar, to inquire the price of a cake of Pears' soap. She repeats the performance at Ram Lal's, the native chemist, at Deethebhoys Jamjeebhoys's, the Parsee "Medical Hall," and at Rozario de Poore's, the Eurasian establishment. Finally, she remembers that her husband gave Badri Doss, the "bazaar" pawnbroker, a Government order for saddle-soap, and from his glittering emporium she departs with a cake of damaged dog-soap free, as a return for the favours bestowed by Captain Grab. And the Anglo-Indian official element wonder why the natives and European commercial community look down upon them.

The native customer occasionally sends the most extraordinary letters to the drug-stores. If he can string together a dozen English words and phrases, he will seize every conceivable opportunity of writing an order of some sort. The following examples will show that the exiled man of drugs has a little free amusement on occasion:—

Boito Khana Lane, Calcutta.

DEARS SIR,—I am a poor Hindu — of — knows what poverty come now and give me a celebrated Beechamp's box of pill cheap. This one cannot afford to blow the expense says I.

Yours faithful,

BABU BENI PERSHAD, B.A.

Old Court House Street, Calcutta,
Ap. 10, 99.

MY GOOD SIRs,—In my belly is damnableness caused it seems by too much provender. My guts is askew, and my eyes are yellor. So is my tongue. So do the needful quick and oblige

Your true friend,

GUKUL CHUNDER BHOSH.

The Mall, Meerut,
July 1, 89.

HONOURED SIRs,—I am a poor man and honest. I wants English lozeng for coff. How much per box pray inform, and I will buy if my coff is as — as up to date.

Your faithfully,

BENI MAHADEO.

The native who has been in England, and who, having married a housemaid, has become a worshipper of English customs, writes as follows:—

MY GOOD CHAPS,—My wife, an English lady of high rank, is about to expect confining. So send me, per happy despatch, name of a respectable nurse for the month, who will do the needful. . . . And I want for myself some "Koko" and a bottle of St. Raphael. . . . So stump up the things; put your fat back into it, fathead. Also Mellin and Nestle's food is wanted by yours truly.

* This is an outside view of the drug-trade in India, and, as such, is interesting, but not necessarily accurate; in fact, we print it on the "seeing ourselves as others see us" principle.—EDITOR.



THE EUROPEAN CHEMIST.

Do the trick all correct and I will pray for you like winking or greased lightning as per your esteemed preference.

Yours affectionately,

R — C — B —, M.A. and Esquire.

Amongst the military and official residents of a station there is no vast demand for medicines, as, being entitled to free doctoring at the hands of civil surgeons and members of the Royal Army Medical Corps, free physicking is included. The non-official element, however, not being thus blessed, are amongst the chemists' customers. The Rajah and other semi-civilised Aryan potentates are also added to his list. They frequently suffer from excesses of various descriptions. If the proprietor of the "medical hall," or chemist's shop, can succeed in obtaining a settlement of his account, the Oriental voluptuary is a customer worth retaining. Unfortunately, however, he is singularly dishonest, and averse to paying up. Numerous communications, dunning letters, and reminders to the Maharajah of Monkeypore will be treated with scorn and silence. Should the Maharajah's paymaster exert his mud-mind, a document of the following description will be despatched to the long-suffering man of medicine:—

Monkeypore.

DEAR SIR,—If you will give 15 per cent. of the amount to me, I make my master pay all right. Will you do the thing?

Yours faithfully,

RAM SINGH, M.A.,
Commander of the Indian Empire.

The home-made concoctions vended by the native surgeries and drug-establishments, are truly wonderful and marvellous in the description of their vaunted powers. The advertisements and pamphlets setting forth their virtues are such that, amongst the unwary and simple, they gain many purchasers. What obese Oriental suffering from a combination of dropsy and hydrocele can be expected to resist the following!—

Walk up and buy Dr. G——'s cure. No more hydroceles or POT BELLIES. Dear friends, Dr. G—— is the chap to cure all damnableness. Manly weakness, by whatever caused, cured in less than NO TIME. Come along and try. Varicose veins kindly treated. I am very cheap.

Anti-expiring.—A wonderful medicine; gives new hearing to the dumb and sight to the deaf fellow. Makes away with lameness; no more gout or sciatica. No rheumatism. Dr. G—— C—— D—— has given me a testimonial of honourable description. I warrant it genuine.

Although the majority of accessories and appliances known to the chemists of civilised countries are to be found in the establishments of their Anglo-Indian *confrères*, the latter are not always as well equipped with up-to-date stock as they might be. As an instance, it is doubtful if the American "toothache-plaster" has ventured East of Port Said; and many inventions and healing lines have probably shared the fate of the Transatlantic contrivance referred to. Certainly the local chemist at Purneah, in Bengal, is not likely to possess a very desired equipment. For, in reply to a traveller, he lately observed that "what was good for Purneah fifty years ago is good enough for Purneah now." These Anglo-Indians occasionally possess odd ideas. However, the majority of lines stocked by the Anglo-Indian, Eurasian, as Parsee, and native chemists, are much the same those appertaining to the establishments of London, Paris, New York, and elsewhere. As befits an inexpressibly warm and unpleasant climate, "Scrub's ammonia" is in demand, whilst quinine and various fever-medicines find a ready sale. Pills, antibilious and otherwise, are as necessary as the Viceroy; and milk-foods of various makes are in requisition. In Calcutta and Bombay during the football season, arnica and lint are frequently asked for. The aerated-water manufacturer is a good customer to the local chemist (for India is a thirsty country), whilst sanitary and disinfecting fluids are disposed of in large quantities. Innumerable preparations for the beautifying and preserving of the hair are

in request, as India is somewhat apt to thin the thatch. Most European firms prepare their own specialities, the generic term for them being "equatorial hair-douche." If they do no good, they cause no evil effects. Tooth soaps and powders are not patronised by the Aryan element; they find it cheaper to clean their teeth by means of water and a piece of stick. The more enlightened of our native brethren, however, use carbolic tooth-powder.

Amongst the gentler sex toilet-powders and preparations for the skin find many purchasers. Rouge, eyebrow-pencils, and other aids to beauty are also stocked by the chemists' establishments of the larger towns. It is said that in Simla and Calcutta during the season the haresfoot-supply occasionally gives out, and that the local rabbit tribe are slain in large quantities, with a view to rectifying the deficiency. But this may, or may not, be a base and unfounded rumour. English and French soaps sell, though an Indian soap company has of late years taken to pushing its wares successfully.



THE RIDING-MANAGER
SAHIB.



THE ORIENTAL
UNDERLING.



THE DURWAN WHO GUARDS
THE PREMISES.

Perfumery is decidedly in demand amongst all elements in India. The wives of "Indian Staff Corps" officers are known to have a weakness for scent, and the Eurasian community, both masculine and feminine, deluge their garments with essences. The native is also an ardent admirer of "*Kush-bhu*" ("sweet stinks"), though he usually confines his attentions to the indigenous "attar of rose," one drop of which will permeate a room. Eau-de-Cologne is in huge demand; those who can afford the luxury adding a bottle to their bath. The small native establishments—mere shanties, some of them—do not stock the lines enumerated. The cheapest forms of native-made essences and perfumes are all that they aspire to. Sachets and amulets have some sale, and smelling-salts are in great demand.

The appliances to be met with in the chemists' shops of civilised countries are also to be found in Anglo-Indian and native emporiums. Seltzogenes and the like have some sale, though chiefly amongst "Rajahs" who "want something to play with."

Commercial Tabs.

ACCORDING to a British Consular report, scented and other soaps of English make have displaced those of French make in Zante, Ionian Islands.

THE *Montevideo Times* says that nine leagues to the east of Chosmalal, River Plate, large and valuable deposits of pure sulphur have been found.

THE imports of drugs and medicines into Canada during the twelve months ended June were:—

1899-1900	1898-99	1897-98
\$1,762,909	\$1,708,851	\$1,442,699

CEREAL CURIOSITY.—At the Yarmouth weekly market a sample of oats was shown which grows without a husk, this being produced by Messrs. Garton's system of cross-fertilisation.

TUNISIAN OLIVE OIL.—A Customs circular, dated November 30 last, fixes at 20 million kilos, the quantity of olive oil, and of oil of residuum of olives, produced in Tunis, which may be admitted into France under special conditions from December 1, 1900, to November 30, 1901.

Trade of British India.

THE India Office has issued this week a "Blue-book" of 126 pages, consisting of a series of tables relating to the trade of British India (1895-96 to 1899-1900). This report appears to be supplementary to that compiled by Mr. J. E. O'Connor, of Calcutta (see *C. & D.*, December 15, 1900, page 958). It contains considerably more information, however, in the shape of figures relating to the drug and chemical trades. At the outset it may be noted that the Indian Government has discontinued the method of presenting Indian money in tens of rupees (Rx.), and has adopted the symbol £ (taking 15r. as equivalent to 1l.); this slight reform will save a good deal of calculation in future. As the figures dealing with the trade of India as a whole have already been quoted by us, a few import and export statistics relating to produce with which we are familiar will not be out of place. From the following tables, giving the imports and exports side by side, one is enabled to see at a glance what proportion of the imported produce is retained by India for home consumption:—

	Imports		Exports	
	1892-99	1899-1900	1892-99	1899-1900
Spices—	Lbs.	Lbs.	Lbs.	Lbs.
Betelnuts ...	76,665,185	89,845,846	290,166	312,360
Cardamoms ...	144,682	73,225	175,808	191,120
Cloves ...	7,106,581	7,815,486	—	—
Ginger ...	465,367	731,940	8,481,192	5,959,850
Chillies ...	—	—	10,676,596	9,408,385
Pepper ...	2,261,357	2,074,971	12,204,066	10,407,748
Nutmegs ...	557,512	484,627	—	—
Other sorts ...	788,354	318,594	172,378	111,072
Quicksilver ...	254,274	192,878	2,411	7,470
Chemicals—	Cwt.	Cwt.	Cwt.	Cwt.
Alum ...	103,307	65,953	3,320	4,037
Arsenic ...	1,918	2,040	157	61
Soda bicarb. ...	48,581	57,142	—	—
(paper-making) ...	£52,268	£54,892	—	—
Sal ammoniac ...	4,512	2,682	648	784
Brimstone ...	28,420	35,068	—	—
Sulphuric acid ...	35,405	47,819	163	233
Copperas ...	20,008	17,375	1,359	2,622
Other sorts ...	£136,888	£147,024	£1,481	£1,331
Drugs, &c.—				
Aloes ...	349	648	288	555
Asafetida ...	8,208	5,809	3,980	2,650
Camphor ...	11,092	9,573	503	344
Cassia lignea ...	21,975	20,022	4,694	4,738
Galangal ...	5,888	2,794	164	274
Quinine ... lbs.	46,674	51,251	895	526
Other sorts ...	£182,848	£172,302	£8,252	£7,194
Gum arabic ...	2,841	1,836	7,297	16,781
Benzoin ...	10,273	13,013	790	1,439
Olibanum ...	20,487	24,206	17,080	19,739
Resin ...	61,530	47,808	1,677	1,681
Other sorts ...	19,843	24,128	3,109	3,556
Perfumery ...	£17,980	£19,479	£9,050	£10,178
Soap ...	80,992	98,574	5,317	6,420
Borax ...	—	—	4,999	4,405
Saltpetre ...	—	—	365,256	397,385
Other chemicals ...	—	—	£8,697	£5,762
Cinchona (lbs.) ...	—	—	1,361,539	3,290,236
Galangal ...	—	—	1,296	1,327
Other drugs ...	—	—	£68,703	£85,687
Opium ...	—	—	92,827	93,378
„ chests ...	—	—	67,128	67,350
Essential oils (gals.)	6,342	7,015	21,000	17,146
Turmeric ...	—	—	48,226	48,000
Castor oil (gals.) ...	—	—	2,140,902	1,527,820
Gums and resins ...	—	—	43,907	51,404
Lac seed and stick	—	—	4,033	2,888
Ajowan-seed ...	—	—	11,622	3,447
Anise ...	—	—	1,018	2,323
Coriander ...	—	—	56,858	52,827
Cumin ...	—	—	14,426	12,476
Fennel ...	—	—	4,850	3,355
Fenugreek ...	—	—	2,191	403
Beeswax ...	—	—	4,846	5,787
Musk (oz.) ...	—	—	848	611
Button lac ...	—	—	31,602	40,320
Shellac ...	—	—	146,481	195,242

Analysing a few of the above figures, we find that the import-trade in spices generally shows a large development compared with previous years, and this is especially noticeable as regards cloves, of which the imports from Zanzibar have doubled compared with 1897-98, but about 2,000,000 lbs. less than in 1895-96. On the other hand, the imports of foreign pepper show a decline during the past five years, being gradually superseded by pepper of Indian growth. Of the 27,700,000 lbs. spices exported, the United Kingdom received direct only 6,000,000 lbs.; another 6,000,000 lbs., however, went to Ceylon, the bulk of it being in transit for this country. The value of the chemicals imported was 299,692%, against 283,120% for 1898-99. It will be noticed that the imports of brimstone, sulphuric acid, bicarbonate of soda, and arsenic increased, while alum, sulphate of iron, and sal ammoniac show a decrease. The imports of aloes (mostly from Zanzibar) show an increase of 299 cwt. and the exports an increase of 267 cwt.; the consumption in India amounted to 93 cwt. Asafetida, however, shows a considerable falling-off in both columns: the local consumption was 3,159 cwt., or 509 cwt. more than the exports. Of foreign-made quinine there was an increased importation of 73,000 oz., and the total consumption was the largest for the past five years. There has been an increase in the shipment of gums and resins, which rose from 34,303 in 1895-96 to 51,404 cwt. in 1899-1900. Some violent fluctuations have also taken place in the shipments of cinchona-bark, which are worth recording. They are: 1895-96, 939,938 lbs.; 1896-97, 321,478 lbs.; 1897-98, 3,056,769 lbs.; and, as will be seen from the table above, there was an increase of 1,928,697 lbs. in 1899-1900. These figures show either that cinchona-planting is extending in India, or that planters are harvesting their bark in order to take advantage of the high unit. China and the Straits Settlements purchased the bulk of the opium between them, only 700 cwt. coming to this country, and that probably in transit to San Francisco. A considerable shrinkage will be noticed in the exports of castor oil. A curious fact is that Australia purchased almost double the amount we did—viz., 527,140 gals., against 227,219 gals. to U.K. The Straits Settlements alone purchased 213,726 gals. France is now receiving the bulk of the exports of castor-seed, the U.K. being second and Belgium third on the list. The shipments of shellac and hutton lac increased by 57,478 cwt.; of the total amount the U.K. absorbed 88,839 cwt., the United States 79,898 cwt., and Germany 34,537 cwt. Perfumery is almost a dead-letter in India, so far as exports are concerned, and a substantial decline is noted in Indian musk, the average quality of which is very inferior.

Trade-Marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost 1l., obtainable through any money-order office.

(From the "Trade-marks Journal," February 20, 1901.)

"CASCARINE" (no claim for "Cascara" or "Cascar"); for pills. By Dr. M. M. Leprince, 24 Rue Singer, Paris. 233,165.

LE M-VIN"; for an effervescing beverage-powder. By W. E. Milroy, 121 Brunswick Road, Poplar, E. 235,237.

"REXELLE" (no claim for "Rex"); for perfumery and toilet articles. By J. and E. Atkinson, 24 Old Bond Street, London. 234,849.

"EWIG-JUNG," and device; for hair-dyes. By L. Joseph, 151 Mauritius Wall, Cologne. 235,076.

"POLMO"; for perfumery and toilet articles. By E. J. Molloy, 469 Holloway Road, N. 235,239.

(From the "Trade-marks Journal," February 27, 1901.)

"FOIA" (no claim for "Foie"); for a chemical substance. By F. Whittaker, 34 Claremont Road, Manchester. 234,312.

"CASCARINE LEPRINCE," and signature and device (no claim for "Cascar" or "Cascara"); for pills. By Dr. M. M. Leprince, 24 Rue Singer, Paris. 234,414.

Commercial Travellers' Taxes.

AN interesting return has recently been issued by the Board of Trade giving particulars respecting the regulations concerning commercial travellers and their samples in India and the colonies. These particulars have been obtained through the India Office and the Colonial Office at the instigation of the Commercial Department of the Board of Trade.

Dealing with colonies where a tax is imposed on commercial travellers, Cape Colony may be taken first, as annual licence there costs 25*l*. A point to be noted is that every licence expires on December 31 of each year. If, however, the licence be issued on or after July 1 the charge is reduced by one-half. The legal definition of a commercial traveller in Cape Colony is "any person other than an importer, who sells or offers for sale by sample or otherwise goods of a firm whose place of business is not in the colony, but not including a person who sells or offers for sale goods consigned to him by a foreign firm." The licences are not transferable. As regards the treatment of samples, a "moderate" amount is allowed to be taken without entry or payment of duty, and free conveyance by rail for 200 lbs. weight is allowed, provided such samples are not for sale.

In Natal a commercial traveller is defined as "the agent or representative who solicits orders for the purchase of goods or things of any person, firm, or company which does not itself carry on a licensed business and also has a place of business in Natal." The annual licence costs 10*l*. and expires on December 31 of the year in which it is taken out, but it is provided that a stamp of 6*l*. is sufficient for licences issued on or after July 1 in any year. The practice is to admit samples free of duty on receipt of a deposit returnable to the traveller if, on his departure from the colony, he can show that none of the goods have been sold. First-class travellers on the railway are allowed 200 lbs. free luggage and second-class 150 lbs. No mention is made of the tax imposed in the Orange River Colony or the Transvaal. Previous to the war, however, substantial taxes were imposed, and it is to be expected that they will still remain in force.

In Mauritius a licence costs 100 rupees and is valid for six months. British Guiana has a "shop" licence costing \$48 (10*l*), which applies to commercial travellers. Samples may be landed free of duty, if at the *ad valorem* rate of import duty, the collective amount payable on the goods landed is not more than \$3 (12*s*. 6*d*.). A tax of \$5 (1*l*. 0*s*. 10*d*.) is levied in British Honduras, and of this the traveller is notified by the customs' officer on arrival. In 1899 Jamaica enacted a law imposing an annual licence of 12*l*. 10*s*. payable by those "soliciting orders for goods" or of "effecting sales from samples"; dealers in spirits, however, pay 22*l*. 10*s*. The licences are renewable on each succeeding April 5. Samples of no intrinsic value are free of import duty, but when saleable a deposit equal to the amount of duty is paid, which is returnable on the re-exportation of the samples. Agents or travellers for a British firm in the Seychelles, are required to take out licences, the cost of which varies according to the nature of the trade.

With the exception of British Columbia and the North-West Territories, the provinces of the Dominion of Canada (Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, and Quebec) are exempt. In British Columbia no licence-taxes are imposed by the Government, but the municipalities are empowered to levy upon commercial travellers of all nationalities, a tax not exceeding \$50 for every six months. A tax is also imposed by the municipalities of the North-West Territories, but the amount is not stated.

There are no regulations in British India, and commercial travellers are not required to take out licences. The Native States also have no special rules, although all Europeans (other than civil and military officers of the British Government), whether they are commercial travellers or not, are required to provide themselves with a pass from the Resident before entering the Maharaja's territories. In regard to samples it may be said generally that duty is charged on import and refunded on re-export to the extent of seven-eighths, and that samples of no marketable value are exempted from all payment.

Finally we come to the Commonwealth of Australia, where throughout New South Wales, Queensland, South Australia, Victoria, and Western Australia no licences whatever are required. Various regulations apply, however, to travellers' samples, the duty being paid on dutiable goods, and drawback allowed on re-exportation. Tasmania is also free from a tax, except as regards wines and spirits. In New Zealand there are no restrictions, nor is any licence-fee imposed. Other colonies and dependencies where licences are not in force are Bahamas, Barbados, Bermuda Islands, British New Guinea, Ceylon, Cyprus, Falkland Islands, Fiji, Gambia, Gibraltar, Gold Coast, Grenada, Hong Kong, Lahuan, Lagos, Leeward Islands, Malta, Newfoundland, St. Helena, St. Lucia, St. Vincent, Straits Settlements, and Trinidad.

Recent Patents.

THE following are abstracts of complete specifications recently published, of inventions for which letters patent have been granted. Money order offices sell postcards, price 8*d*. each, which, on filling up with the number and year of the patent and posting, secure a copy of any complete specification.

Utilising Waste Sponges.—M. J. Théodoridis, Stockholm, has obtained protection for the idea of lining sponges, otherwise wasted, with canvas or loofah and hindling the edges. (15,631, 1900)

Paint-remover.—A. Klee, Viernheim, Hessen, has had protection granted for an emulsion for removing paint and varnish of the following composition:—Water 50 parts, linseed oil 10 parts, Venetian turpentine 20 parts, soda 5 parts, spirit of wine 15 parts. (14,114, 1900.)

Boiler-incrustator Compound.—J. J. Johnston, Annan, Dumfries, has patented a compound for preventing and removing scale from boilers. The specification gives the formula as eucalyptus-leaves 330 lbs., ammonium chloride 130 lbs., creasote 1 oz., water 1,100 gals. (14,976, 1900.)

Laundry-blocks.—Dr. M. Lehmann, Berlin, has patented a laundry-block for smoothing the frayed edges of linen, and preventing the edges irritating the skin. The tablets are made of carnauba wax 30 per cent., beeswax 9.75 per cent., and talc 60 per cent., and are shaped in grooved moulds, the grooves being for convenience in using. (13,412, 1900.)

Cattle-food.—L. Hamburger, Königshütte, and H. Kallmann, Kattowitz o/S., have patented a method of treating brewers' spent grain so that it makes a nutritious and easily digested food for cattle. A hundredweight of spent grain is soaked with a mixture of 1 lb. of crystallised soda and 4 oz. of unslacked lime in 10 gals. of water, and afterwards pressed. (13,745, 1900.)

Charcoal for Decolorising.—R. Ostrejke, Government Kowno, Russia, has had protection granted him for a process of preparing charcoal of great decolorising-power. The substances from which the charcoal is to be made are first boiled in a 30 to 40 per cent. solution of calcium chloride and dried. After carbonising, the contents of the retort are discharged into water and washed to free the charcoal from calcium chloride. The charcoal is then washed with hydrochloric acid, followed by water, and again desiccated. Magnesium chloride may be used in place of calcium chloride. (14,224, 1900.)

Pancreas Preparations.—The Chemische Fabrik Rhénania, o/Aachen, have obtained a patent for an aseptic preparation from the pancreas. An example of the process is as follows:—One hundred grammes of pancreatin or pancreas-juice is shaken with a litre of 10-per-cent. salt-solution, and the liquid filtered. With the filtrate a concentrated alcoholic or aqueous solution of 15 or 20 grammes of salicylic acid, or acid of the same kind, is shaken. The precipitate is filtered, washed, pressed, and purified if necessary by alcohol and ether. (14,413, 1900.) The same firm have acquired patent-rights for a preparation capable of resisting stomach-juices, which consists in collecting and drying the precipitate formed by adding tannin to an aqueous solution of pancreatin. (14,414, 1900.)

Pharmacy at Dieppe.

I SPENT a few days at Dieppe towards the close of the last bathing-season, and was interested to find that practically all the ten pharmacists established there are prepared to meet the wants of British visitors; in fact, one may say that the English-speaking people are honoured among pharmacists on the Continent of Europe. They are, rightly or wrongly, reputed to be the bravest takers of pills and potions in the world, and whatever they may be at home, they do not seem to trouble very much about cut prices when travelling and they happen to want a thing. The Dieppois pharmacists are alive to this fact. Dieppe has been called the Brighton of France, but, as far as my experience goes, their resemblance ceases when one has mentioned the fact that they are both the nearest seaside resorts to their respective capitals. However the authoress "John Strange Winter" (Mrs. Stannard) has written nice things about the town, of which the Directors of the Casino showed their appreciation by presenting her with a diamond ring, so, perhaps, there is something in it. In any case it is certainly a cheerful place.

During my stay at the popular Normandy watering-place I happened to be the guest of a Paris doctor, who had a house there for the season. My friend is a Kodak disciple, and found that M. Brau, whose pharmacy is at



140 Grande rue, Dieppe, would undertake to develop the films, which he did with considerable skill and success. This was how I found my way first of all into M. Brau's officine, and soon discovered that he makes quite a speciality of an English trade, so that he can be quoted to some extent as the typical Anglo-Saxon pharmacist of the town. "Pharmacie Brau" is the sign over the shop front. "The English Pharmacy" figures on the right-hand window, while "Pharmaciens de 1re classe" is inscribed on the left. On his labels appear the words "Inspecteur des pharmacies" in French, or "Government Inspector of Pharmacies" in English. This latter title is striking and looks very important even to a resident in France like myself, for one sometimes overlooks the fact that pharmacies are annually inspected by committees chosen in each town or district, and consisting of one or more doctors and pharmacists, to whom the police Commissary is added as directly representing the authorities.

The season was fast waning in Dieppe when I was there, and towards the end M. Brau himself profited by the remaining fine days of autumn to make a trip to Switzerland. But his assistant is a capable man, and fortified, as he is, with the *C. & D.* every Saturday morning, justly considers himself a bulwark of English pharmacy. An interesting item about one of M. Brau's neat circulars is the following, especially as it comes from a Government inspector:—

English pharmaceutical products enjoy a universal reputation, due to the absolute purity of the raw materials from which they are prepared, and to the fact that their composition is based on the most recent discoveries of medical science. Consequently, I believe I am rendering a service to persons whose desire is to employ irreproachable products, in placing at their disposal these high-class preparations in use in the leading pharmacies of London and New York, and which are regularly asked for during the season by rich English and American customers.

Then follows a list of nearly seventy different preparations, divided under such headings as "Hygiene of the Mouth and Teeth," "Hygiene of the Skin," "Hygiene of the Hair," "Special Preparations for Children's Toilet," and "Recommended English Medicaments." To repeat the list would be to give the names of the best-known preparations we put up in England under our own labels, such as perfumed antiseptic tooth-powder, face-lotion, stimulating hair-lotion, Red Cross embrocation, and so on, most of them being given with their English names, a short explanation in French following. "Dépôt for milk of the renowned Calmont Domain received twice a day in sealed bottles" is the statement that ends the list.

And very interesting it is, too, when we have been complaining so much at home of want of appreciation on this side of the Channel, to find a prominent French pharmacist to all intents and purposes giving English pharmacy the preference to that of his own country.

"How do you find photography answer as a branch of pharmacy?" I inquired from M. Brau's manager. "Well, it is a very good side-line, and you can well understand that with snap-shooting so much in vogue there is quite a business to be done during the season; but, of course, it is not pharmacy, and consequently remains quite subservient to it." "But it helps to keep you in touch with your customer?" "Yes, that is so; and then it is also an interesting adjunct."

The pharmacies at Dieppe are neither large nor luxuriously fitted up, and M. Brau's is no exception to the rule. There are showcases on each side of the shop, and, of course, the cash-desk, without which no shop in France would be complete, but no counter. There is, besides, a slight professional air about the place, which gives a certain sense of dignity and decorum quite suited to pharmacy. Most of the English patents displayed by M. Brau are also sold by the other leading chemists in Dieppe. They include old friends such as Eno, Condyl's Fluid, Price's Glycerin, Pears' Soap, Vinolia, Bishop's Citrate of Magnesia, Beecham's Pills, B., W. & Co.'s Hazeline, Cherry Blossom, Elliman's Embrocation, and many, perhaps twenty, others. In fact, the list is so numerous that one almost wonders if the strict regulations against the admission of foreign patents into France are so very strict after all.

Near by M. Brau's, but on the other side of the road going towards the port, is M. L. Couperot's pharmacy. "The English chemist," "pharmaceutical chemist," and "photography" are the leading watchwords on his shop-front. A minute or two further on the Pharmacie Guillard, in the Place Nationale, is reached. M. Guillard was away for a short holiday, but he was very ably represented by Madame, his wife, who sat at the receipt of customs, the business of the pharmacy being conducted by male assistants. "English pharmacy? Oh, yes, we do quite a good deal. Evans, Lescher & Webb's traveller calls once a year and takes our orders," and an assistant obligingly showed me their English stock of patents. "But you make quite a feature of photography?" I inquired, addressing Mme. Guillard. "Yes, my husband has gone into that a good deal, and we have a good business in photographic materials in all their branches, but naturally he is first and foremost a pharmacist. I think I am right in saying that we own one of the oldest, if not the very oldest, pharmacy in Normandy. Its existence can be traced back for a period of 300 years, and some day when you are here again you must get M. Guillard to tell you something of the history of the business. For one thing, the father of Descroizelles, the chemist, owned this very pharmacy nearly two hundred years ago, and François Henri Descroizelles was born here on June 11, 1751." I took leave of the amiable *pharmacienne* with some regret, for one seemed to detect that she possesses a fund of interesting knowledge, though screened, perhaps, from the casual observer by the business and routine of every-day life.

On my way towards the Casino for my morning sea-bath before lunch, I called in at M. Mahille's "pharmacy of the Salted Well," Place du Puits Salé. His claim to the attention of the public is "pharmacien-chimiste, student of the Superior School of Paris." He keeps a fair stock of English patent medicines, and has a facility for the despatch of business. A red cross is a prominent feature outside his shop. Some yards further on, at 4 rue de la Barre, is M. A. Lemaitre's pharmacy (pharmacie du Casino), on the front of which is one of the most striking signs I have ever seen outside a pharmacy. It is of carved oak, and the centre is formed of a tree with a serpent twined round the trunk, stones covering the ground, representing, it was explained to me, the three realms of Nature, animal, vegetable, and mineral, from which pharmacy obtains the ingredients for medicine; the motto, "*histribus versantur*," completes the centre, which is surrounded by a neat border, a garland of flowers hanging across the top. The remainder of the sign is made up of apparatus used in chemistry and pharmacy, and various signs of the Zodiac. English patents find a temporary home here, too, but no special bid is apparently made for an English *clientèle*. I have spoken more of the patent-medicine side of British pharmacy at Dieppe, but English prescriptions are regularly dispensed. The prices charged are moderate, and there is apparently little difficulty on that score with the visitors for the season; but the call for dispensing is not sufficient to make it worth while for any of the pharmacists to engage an English assistant for the summer months. The Dieppe pharmacies close at about 10 P.M. during the season, but 9 o'clock is found late enough in the usual way.

Advertising Ideas.

ALMANACKS.

With the beginning of each year we are generally inundated with specimen-almanacks, which are distributed by various enterprising pharmacists among their customers. This year, in spite of general complaints of bad trade, the almanacks are as numerous as ever, and are more striking and in better taste than usual. Of the present batch, perhaps the best, both from the points of view of attractiveness and usefulness, are those of Mr. W. Ive, 115 Gloucester Road, South Kensington, and Messrs. Allchin (Limited), England's Lane, N.W. The "New Century Almanack" is an admirably-printed and beautifully-illustrated booklet, containing photographic illustrations representing twelve of the pleasure towns of England and Wales, besides a valuable dictionary of household remedies, review of the censuses of the century, a modern calendar, and much varied reference information. In the latter category, besides the usual Post Office information, a list of London Special Hospitals and Nursing Institutions is given. Some of the learned societies are indicated, and the world's rulers are given. Last, but not least, the Poisons Schedules are printed in full.—The "New Century Pictorial Almanack" of Messrs. Allchin (Limited) is somewhat similar in matter, but is more profusely illustrated. The outside cover contains an excellent photographic reproduction of the outside of the pharmacy in England's Lane, and the first page inside shows the interior of the pharmacy.—Ell's "Illustrated Almanack" for 1901 is of a somewhat different stamp. It is produced by Mr. S. Ell, of Dunster, who, besides being a successful pharmacist, is the manufacturer of Dunster home-made marmalade. As might be expected, the almanack has more of an agricultural tone about it than the ones we have noted before, to make it the more suitable to the *clientèle* for whom it is intended. If we may judge by the number of advertisements, the almanack pays its proprietor well.—The "Universal Almanack," edited by Mr. J. Spencer Palmer, chemist and dental surgeon, of Thorbury, Gloucestershire, is imperial and patriotic in tone. The illustrations are those of the army leaders who have distinguished themselves in the South African campaign, and the history and origin of the South African war is detailed in full. But perhaps the most interesting thing to the majority of people glancing through this production will be the "Jottings and Reminiscences" by the Editor. These are well worth reading, as Mr. Palmer deals with things

generally in a quaintly genial way which is most entertaining. He first writes of the "New Century," then he gives his views "On Editors," also "On Preachers and Lecturers," "On Authority Training," &c., winding up with a discursive comment on general topics. The whole is a clever and amusing commentary on things in general.—That hardy annual from the far north, "Lawrence's West Highland Almanack," comes this year in a khaki cover and printed on yellowish paper. The information which Mr. Samuel Lawrence, chemist, Oban, manages to get into his twenty-eight pages of literary matter must be of considerable local use and interest, and will this year increase, not only appreciation for itself, but the reputation of its producer.—Kemp's "Household and Farm Almanack," published by Mr. H. R. Maynard, chemist and druggist, 17 High Street, Horn-castle, contains eighty-six pages of literary matter and about sixty pages more of advertisements. Besides a diary and calendar, Mr. Kemp has included a special cash-price list of drugs, patent medicines, and sundries, and a detailed account of his "home specialities." A section is devoted to useful information for farmers, comprising doses of veterinary medicines and remedies for various animal ailments. The sick-room and its requirements are described, timely hints about the preparation of various kinds of poultices, the care of infants' feeders, and so forth being given. Parlour chemical magic has five pages allotted to it, and a selection of cookery recipes rounds off the whole.

MR. THOMAS WEBSTER, optician, dispensing and agricultural chemist, of Bangor, North Wales, has also selected one of the New Century Almanacks as the advertising-medium for his pharmaceutical and veterinary preparations and specialities. On the inner cover is a good photo representation of Webster's "Old City Pharmacy" at Bangor, whilst on the back cover is a striking view of Bangor pier and town, with the country beyond taken from the Menai Straits. The almanack is printed in colours and profusely illustrated in the excellent manner of this well-known series.

CIRCULARS AND PRICE-LISTS.

MESSRS. SMART & COPLEY, pharmaceutical chemists, of Bulawayo, sent their customers at the festive season a delicately printed Christmas card, with seasonable greetings and finely printed photos of the interior and exterior of their shops—a little enterprise which might be adopted by others with profit.

MESSRS. WALKER & HARRIS, chemists, Canterbury and Ashford (Kent), in distributing their price-lists, offer a prize of 1l. to the person sending in by December 1 the most complete list of mistakes, grammatical or otherwise, occurring in the list.

MESSRS. LEWIS & BURROWS (LIMITED) have issued from their Great Portland Street premises a circular to their customers in the following terms:—

MADAM,—We wish to respectfully draw your particular attention to our high class pharmacy at 83 Gloucester Road (nearly opposite the Metropolitan Railway Station). This establishment was opened expressly for the purpose of dispensing high-class medicines, and for supplying the choicest perfumery and toilet articles, &c., at modern prices, and we believe we are correct in saying that it is the only establishment of its kind in your district. That there are other high-class chemists we freely acknowledge, but we are convinced that a comparison of our prices with theirs will show that their prices are some 30 to 50 per cent. the higher.

We are convinced that if you will favour us with your patronage we shall afford you every satisfaction.—Yours very respectfully.

The circular is well chosen, mentioning the articles only which appeal to the gentler sex, and the idea is a good one, as by impelling curiosity business is most likely to accrue.

THE HERB TRADE.—Messrs. Edward Cross & Son, chemists and herbalists, 11 High Street, Birmingham, have issued another edition of 20,000 copies of their "Pocket Guide to Health" making a total issue of 103,000. It consists of 96 pages, and contains a description of a large number of diseases that "flesh is heir to," and directions for self-treatment by Messrs. Cross & Son's recipes. It also comprises a list of herbs, with English and botanical names and medicinal properties given; lists of proprietary articles, domestic requisites and drugs, together with advertisements of the firm's specialities and trade advertisements.

Pharmaceutical Veterans.

Thomas Critchley.

AT BLACKBURN last week honour was done to a veteran in pharmacy who has commended himself to his fellows in that not altogether unimportant part of the pharmaceutical body corporate, and we think some particulars of the career of Mr. Thomas Critchley will not be amiss at the present time. Mr. Critchley's father was a grocer in a small way in Alston Lane, near Longridge and Preston, and, when in a confidential mood, Mr. Critchley will tell how he trudged from his home, with a shilling in his pocket, given him by his father, to begin life as an errand-boy with his uncle, Mr. John Critchley, of Blackburn. In the course of the journey his shoes wore out; but he held fast by the shilling which he treasures to this day. This was in the year 1850, and Mr. Critchley worked with his uncle until 1863—the year of the cotton-famine. He recalls that business-hours in those days were from 7 A.M. till 10 P.M. daily, so that opportunity for self-improvement was restricted. But ambition to become a chemist had fired young Critchley, and no means of self-education and advancement were lost sight of. He ground aloes, peppers, and spices, mixed cow-drinks, and manipulated horse-powders with care and fidelity, and he tells



MR. THOMAS CRITCHLEY.

weird stories of the elder days and old styles and methods. In 1863, with a small capital, Mr. Critchley essayed business on his own account. For the first ten years he had to struggle hard; but the dogged perseverance which is characteristic of the man stood him in good stead, and brought him ultimately into the smooth waters of prosperity. In after-years he confessed that "sticking to business and not overstocking" carried him through. It was not until 1876, however, that Mr. Critchley "struck ile" with the starch-gloss with which his name is identified. The early history of Critchley's starch-gloss is remarkable in that Mr. Critchley would spend no money upon advertising it except what was made off it, but he spent the profits so judiciously that he is now a comparatively wealthy man. Some five years ago he became a member of the Blackburn Town Council, and he is still one of its most active councillors. In business he is a man of untiring energy, and methodical to a degree. These qualities he has brought to bear upon municipal affairs, and he also takes active part in the management of building clubs, trade societies, and the business of C. A. Critchley & Co. The latter business is carried on in co-operation with his son, Mr. C. A. Critchley, pharmaceutical chemist, and is distinct from the starch-gloss business, which is still under the style of "Thomas Critchley." Mr. Critchley adds to his other qualifications that of a bank-manager.

Scientific Progress.

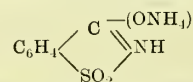
The Preparation of Vanillin.—A patent has been granted to a Swedish chemist for the preparation of vanillin by the following process:—Para-oxybenzaldehyde is converted into its metanitro derivative, which is then reduced to the corresponding amido compound. The latter is dissolved in methyl alcohol and treated with nitrous acid, when vanillin results. (*Chemiker Zeitung*, 1901, 163.)

Extraction of Natural Indigo.—A French patent has been granted for the preparation of indigo from the plant by the use of an oxidising ferment such as diastase. According to the patentee, this process gives a finer indigo and a better yield than the older processes, in which, of course, the indigo is set free from the glucoside in which it is combined by a natural process of decomposition. (*Chem. Zeit.*, 1900, 185.)

Sulphuryl Fluoride.—MM. Moissan and Lebeau at the Academy of Sciences, Paris, on February 18, described sulphuryl fluoride, SO_2F_2 , obtained by the action of fluorine on sulphur dioxide. It is a colourless gas without odour, and solidifies in oxygen, melting at -120°C , and boiling at -52°C . The gas, without action upon water, even when heated to 150°C in a sealed tube. M. Moissan remarked on the fact that the affinities of fluorine rather resemble oxygen than chlorine.

Natural Formation of Terpene Compounds.—Charabot, in one of his speculative and somewhat unconvincing papers, urges that the function of chlorophyll in essential-oil bearing plants, is of sufficiently wide a nature to have a direct influence on the formation of the so called terpene esters and alcohols—that is, the compounds of the geraniol series. He admits that the climate, temperature, altitude, and various other factors have a marked influence on the resultant development of these bodies. (*Chem. Central.*, 1901, 467.)

A New Sweetening Substance.—According to Cerf, when the anhydride of benzoyl-ortho-sulphamide is suspended in water and treated with ammonia, and the solution concentrated in vacuo until, on cooling, crystals separate out; these crystals consist of a new substance of the constitution



This compound is said to be much sweeter than the purest saccharin. (*Apoth. Zeit.*, 1901, 133.)

New Remedies.—The methylene derivative of creosote has been put on the market as a tasteless and odourless powder, which is claimed to have a very powerful action and to be quite innocuous. It has been termed "pneumin." A similar body is pulmoform. This is the methylene compound of guaiacol, methylene-diguaiacol $\text{CH}_3(\text{C}_6\text{H}_3\text{OH.OCH}_3)_2$, a yellow, odourless, and tasteless powder, of great activity and non-poisonous. It is claimed to have great value in tubercular cases. Chinotropin is urotropin urate, and uresin is the double citrate of the same body, together with lithium. Alhoferrin is an albumen compound of iron and phosphorus.

Organic-mercury Compounds.—A very interesting paper on the organic compounds of mercury by Dimroth appears in the current issue of the *Chemisches Centralblatt* (1901, 449), in which several new bodies are described. If mercuric acetate be allowed to react with benzene, phenyl mercury acetate is formed. This compound forms crystalline leaflets melting at 150° . A corresponding compound of toluene is described, and also numerous phenolic compounds. Of these, the anisyl derivative is interesting. If oxyphenyl mercuric chloride be allowed to react with methyl iodide and soda, anisyl mercuric iodide results. This body forms needles melting at 168° , and is converted into mercury-anisyl by the action of tin and soda oxides. This body forms prisms melting at the same temperature as the former compound—viz., 168° .

The imports of chemical-, drugs, and perfumery into Egypt during 1899 amounted to 274,112*l*, against 230,166*l* in 1898, and 258,517*l* in 1897.

THE STATE OF KANSAS has been a prohibition State for many years, and many are the stories that come to us of evasions of the law. Spirits are sold only as medicine at the chemists', and it is rumoured that those in the know can always obtain them as "cholera-mixture." The name varies course, and to get round his ignorance of the correct proprietary name a bronzed and stalwart cowboy recently entered a shop and placed a 2-gallon demijohn on the counter with the comment, "Fill her up, the baby's sick."

Correspondence

TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

Thoughts *re* the Pharmaceutical Council Election.

SIR,—The question of to-day is, "Has the Pharmaceutical Society attained the ideal of its founders, or has it realised the requirements of its members?"

This subject should be seriously considered by the members of the Society at the present time, in view of the immediate necessity there is for sending to the Secretary the names of suitable members for election to the Council to fill up the seven vacancies there in May.

For the past fifty-nine years our Society has been guided by the Council, and the thought naturally arises, "What have we as individual members derived by all that has been done, or by the many thousands of pounds with which we have entrusted our successive Councils?" True it is that Parliamentary Bills on behalf of pharmacy have been drafted, circulated, considered, and paid for, but have ended there. Once we had a capital fund of over 30,000*l.*—means enough, surely, to test our strength and to have employed the highest skill in drafting a simple yet efficient Bill for our protection. Those we placed in power thought otherwise. Alas! for our present position—the money has been largely frittered away on splendid premises for our officials, the history of which may some day be learned. Now, what is our lamentable condition to-day, between what our oft-elected members of Council have done and what the membership generally have not done? One thing is sure—that the great majority of our members are pressed and hemmed all round with greatly reduced incomes and vastly increased difficulties in conducting business, or even in making a living out of it. Not to speak of the bars and gates prematurely erected by our Councils, in the form of increased fees and enactments regarding examinations, thereby preventing many young men from entering our ranks, because the inducements are not such as would make it worth their while, had the management of our affairs been placed in the hands of those who knew the requirements of our calling better, the fundamental principles of our constitution would have been more respected and our condition would have been much better to-day. To illustrate this I shall quote from the first volume of the *Pharmaceutical Journal* of 1842:—

The Pharmaceutical Society is instituted for the purpose of uniting the chemists and druggists into one ostensible, recognised, and independent body, for protecting their general interests, and for the advancement of pharmacy.

Mark the order of these sensible ideas, the inverting of which has much to account for in what now exists. In the same journal are given the elective powers of the Council—they are annually to elect office-bearers and a Secretary; but observe the qualification that this person must possess before he could be elected, the words being, "who must be a member of the Society." This, of course, is verified by the wording of the Royal Charter of Incorporation, Clause 190, "The Council are to appoint a proper person to be Secretary thereof," no doubt meaning that, as under the "Laws and Constitution of the Pharmaceutical Society," this proper person should be a member of it, as witness the practice of the Council for forty-three years, the first two gentlemen who were elected to this office being members of the Society. Then came a day when those in power appear to have become a law unto themselves, and one who was not a member of the Society was elected to this important position. The present President lately delivered a lecture, in which he advised the membership to approach the case he was submitting with "clean hands." Is there not a sense in which the Council should act first on this advice, and set

their house in order before some of them retire? If one has been elected to the position of Secretary who has not the proper qualification, what is the legal effect of actions taken and business transacted in his name? Would it not be well to have this subject put right before we proceed to get by-laws confirmed or a new Act of Parliament considered. Let me again quote from the *Journal* of 1842:—

Much remains to be done and many difficulties to be overcome, but there is no doubt of our ultimate success in all that we have undertaken, provided we are true to ourselves and persevere in the task with zeal and unanimity.

This sentence reads as if it had been written for to-day, for unity of action under new and competent leadership must be directed towards the election of suitable men to occupy places at our Council board. Some of those who retire at this time are dear old friends, who have no doubt done their best, but, circumstanced as they have been, this has not come up to the requirements of the great body of the members. So, in the logic of the President as to the Strachan case, let us say we have no desire to put some of the retiring members of Council to further trouble on our account. Let us now try what a change on the Council can do. Indeed, our very existence in some cases demands this. We have patiently waited for years, and are worse off than we were fifty-nine years ago, so that a new era must be begun. If the whole membership will act on the recommendation of our founders, as already quoted, and every member send in his voting-paper properly filled up and signed, the progressive minority on the Council will become the majority. One more determined effort all over the country may do this. If we lose this opportunity our position will gradually get worse—if worse it can be. Yet, if we rise to the occasion, progress will at last be made, difficulties will vanish, and the needed reform will be secured by every member doing his duty.

I remain, &c.,

JAMES MACKENZIE.

Edinburgh, March 2.

[Whatever the original intention of the founders of the Society may have been, there is no question of the fact that the charter and the Pharmacy Acts do not require the Secretary to be a member of the Society.—EDITOR.]

Photographic-dealers' Profits.

SIR,—In the interests of the trade, may I call your attention to the enclosed cutting from the March number of *Ilford Photographic Scraps*:—

It will be necessary to make friends with the local chemist, who will charge very little for weighing and mixing, which it will be found convenient to let him undertake.

An ounce bottle of pyro. costs 10*½d.* The chemist will, for a regular customer, dissolve it with the 20 minims of nitric acid and put it in a bottle for 1*½d.*, making a bottle of concentrated pyro. for 1*s.* If the amateur has much developing ahead—as, for instance, after a summer holiday—it may be worth his while to invest in a large Winchester quart bottle, which holds 80 oz. to 90 oz., and only costs 6*d.*

If a chemist buys his Schering's pyro. at the cheapest rate it costs at least 10*d.* per bottle, including carriage, and most chemists get at least 1*s.*; yet a highly trained man, according to the Ilford Company, is expected to give his time, nitric acid, and a bottle for an extra 1*½d.*, but Ilford plates must on no account be cut in price.

I ask—Is it just or fair for this company, who have built up their business by the aid of the drug-trade, to try and cut down our already paltry profit by the aid of such a cheeseparing suggestion, which, I contend, is unworthy of such a large firm? I trust that chemists generally will impress on the Ilford company that such tactics are unbusinesslike, and will not tend to increase the interest felt by the trade in their goods.

Yours faithfully,

PHOTO. CHEMIST. (93/7.)

[The article from which the above cutting is taken is signed "G. G. Lewis," but the Ilford Company ought, one would think, to exercise some sort of censorship over their publications. Judging from correspondence which we have received it has given much annoyance to photographic chemists.—ED.]

SIR,—A photographic customer of mine tells me that he has recently purchased a camera listed at two guineas for 28*s. 6d.* through a colleague in his department at the G.P.O.,

who also supplies any camera made by the Monroe Company at the same rate. I should be glad to know if the system is general among manufacturers, as the practice seems unfair to the dealers, there being little doubt that the advantages are also extended to outside friends. I understand that quite a large business is done by this agent, but my customer informs me, very regretfully, that he is not able to supply plates and papers at the same rate, for which we should be duly thankful.

Yours,
DISGUSTED. (93/20.)

Fundamentals.

SIR,—Mr. Reid, I gather from his letter in this week's issue, looks upon me as "one of our most powerful reformers." *Ergo*: I am a reformer! My modesty is somewhat disturbed by the description, and an innate desire for information impels me to ask what he calls the persons who oppose my view? He continues, "but it is in the nature of reformers that they should concentrate their gaze on one point only, and they only end in being genuine reformers (I should say, I am a reformer or not), if that point chances to be the correct one." Now this is true, or it is simple flapdoodle. I accept the statement, and ask to be judged accordingly. If the principle which I will not compromise or barter, is not the only foundation upon which a "profession" of pharmacy can be built, then I fall to the ground. I will neither have limited liability nor covering. Penal powers, I have long concluded, we cannot hope to get. The statute law which declares that none but qualified persons shall practise is so sane and reasonable, and every bit of my considerable experience goes to prove its acceptability, that I declare again, if we unite upon it, nothing can resist so moderate a claim. "We are now working for a new principle," Mr. Reid says. I presume he knows where he is working, that he is not merely floundering. Will he tell us, in plain English, what definite principle he is working for? He talks of "every principle," &c., of the Act of 1868. I confine my interest to one only, which runs through and permeates and is the very essence of both the Acts of 1852 and 1868. To listen to much of the language used, principles might be as common as cabbages—though not as nourishing.

Let us come to an issue, Mr. Reid, like good men and true; believe me, if you beat my argument, I will acquiesce.

Yours faithfully,

Blackburn, March 5.

R. LORD GIFFORD.

Pharmaceutical Society's By-laws.

SIR,—In view of the large powers proposed to be conferred by the concluding paragraph of Clause 7 of the new Pharmacy Bill upon the Council of the Pharmaceutical Society, which would enable it "to alter, amend, or abrogate the regulations made under this section"—viz., those regulations concerning evidence of systematic training, and division of the Qualifying examination, &c.—it is a matter of urgent importance that the advisability of conferring such powers be fully considered before they are granted. A matter of no less importance is the introduction of a clause into the Bill to amend the present method of adopting new by-laws. It is the fact, as stated by Mr. Clague in reply to a question asked by me at the Newcastle meeting last Wednesday, that a general meeting of members of the Society to consider new by-laws has no power to accept or reject any particular by-law which it may consider objectionable, but must accept or reject the by-laws *en bloc*. Mr. Harrison, in answering my suggestion that a clause be inserted in the Bill to enable any new by-laws to be submitted one by one, and considered on their individual merits before adoption or rejections defended the present system on the ground that the by-laws might hang one upon another, and that the rejection of one might stultify the remainder. Now, Sir, I have a great respect for Mr. Harrison's judgment, but, after careful consideration, have come to the conclusion that much more can be said against the present method than in its favour. In a public meeting, when a speaker has to make an immediate reply to a question without time for much consideration, he is apt to express views which further thought will lead him to modify, and Mr. Harrison will only be doing justice to his usual sound judgment if he recognises that the position he adopted is not an adequate reply to my contention. Under the present system, the Council has power to sandwich

a by-law of a most objectionable nature amongst a number of useful or harmless ones, if it chooses to do so, and under these circumstances a general meeting is obliged to swallow the bad in order to obtain the good. Such powers are too wide to be entrusted to any body constituted as the Pharmaceutical Council is. One of the members of the present Council will remember how a proposal which many thought undesirable at the time—viz., the imposition of the ten-guinea fee—was carried through a general meeting on the back of another proposal which met with much more general acceptance—to wit, the raising the standard of the entrance examination. To meet Mr. Harrison's contention as far as possible, I would suggest that a general meeting have no power to alter or amend any by-law, but only to accept or reject it in its entirety. Further, that where a number of by-laws hinge upon each other they may be considered together unless any objection be raised to such procedure.

I am, Sir, yours truly,

FRANK R. DUDDERIDGE.

Newcastle-on-Tyne, March 2.

Professional Remuneration v. Trade Profits.

SIR,—I have read your leader, *re* dentists, with special interest, being one of those practitioners who had only to claim registration (as well as a chemist and a veterinary surgeon). It is very likely not known to many of your readers that veterinary surgeons have made such strides in professional status as to be far ahead of the dental profession in matters of etiquette. Those who can look back thirty or forty years, and remember the "farriers" of those times, will find it difficult to believe that the vets. have passed a self-denying ordinance, by which they preclude themselves from advertising at all, deeming it "disgraceful from a professional point of view" and punishable with the only penalty in the hands of the Council—striking off the rolls. One of the consequences has been to hand over the animal-medicine trade to advertisers not burdened with a diploma or a conscience. The less scientific practitioner of a former generation had a sale for his own gripe-drinks and cough-powders, and 3s. 6d. for a pound tin of alteratives: such things being ordered by the dozen or more at a time, and making the pharmaceutical chemist green with envy of men he thought so inferior to himself in education and culture.

Now, with a curriculum almost as long, and quite as expensive as the medical, the easy and profitable part of the business is gone; and that, not to the chemist and druggist who could and would make up stock medicines, but to the advertising firms who keep a score of travellers and canvas shops in every showyard all over the country. If the vets. were inflated with professional pride, surely the druggists have missed their opportunity, and allowed the hard-headed business men to profit by the folly of the one and the apathy of the other. There is apparently a process of evolution in the business of the chemist and druggist of a somewhat similar character going on, and with the probable result of separation of the science and art of pharmacy from the vulgar and somewhat degrading business of retailing quack *nostra* (with the latest American aids in advertisement). Aware as I am of the high qualifications now demanded of the graduate in pharmacy, I cannot but lament over my first love (though I have forsaken her), and regard the duly qualified chemist as an underrated man who gives a vast amount of valuable time to fit himself for services to the public, which are in no way repaid. He never gets a fee, and any garrulous old woman (either sex) can waste his time over the purchase of a pennyworth of pills. He is a shopkeeper without the opportunities of an unlimited turnover which are open to the draper, the grocer, and the butcher. His responsibilities are grave, and he may any day be abused by a coroner, ignorant of the law he administers, and in respect of the paltry sale of a pennyworth of poison. This may seem somewhat of a digression, but it is made by a quondam chemist with a view to asking your readers if they are right in keeping a shop open for everlasting hours, and vending other people's proprietaries, while deriving no real profit from a professional training? Whether we look at the dentist, the chemist, or the veterinary surgeon, we can scarcely see the advantage to either of the upward curriculum. It is the public alone which benefits.

This is very well no doubt, and as it should be, but the labourer is or should be, meantime, worthy of his hire. The

crowding of the dental profession has brought down fees, while the unrighteous competition of the cutting store has lowered prices of chemists' goods, so that his professional skill without fees no longer affords a living on an investment which formerly yielded a fair reward.

Yours, &c.,
HAROLD LEENEY, M.R.C.V.S., &c.

The Wily African.

Messrs. Judd & Manners, transfer-agents, 76 Cannon Street, E.C., recently received the following communication from the Cape Coast:—

DEAR SIR,—Your fame having being recommended to me by a certain friend which caused me very much pleasure to draw his to your attention to send me full of your samples and price-list in order to see and choose what will be suitable for Africans and order some early. I have the honorer most respectfully to inform you that I am about to forward you African produce. Therefore I expect for your reply as well as the said samples.

I remain, yours faithfully,
QUACOE ABBAH.

The letter was unpaid, and Messrs. Judd & Manners state that hundreds of natives on the Gold Coast make quite a substantial living by obtaining samples from London firms and selling them up-country. The samples in this case, however, are likely to be rather bulky.

Dispensing Notes.

A section for the elucidation of difficulties and interchange of views on dispensing-problems.

Dispensing Orthoform.

SIR,—The following prescription was presented to me for dispensing a few days ago. Perhaps some of your readers who have had experience with orthoform will explain how it can be prepared?

Sol orthoform (80-per-cent.) in absolute alcohol ... 3j.

Mix. To be used as directed.

B. R. O.

56/23. *Jam-pot.*—White Ointments.—White petroleum-jelly is generally used, and the Pharmacopœia so indicates in the case of white-precipitate ointment which you write about.

73/35. *M. P. S.* (Thirsk).—The new edition of "The Art of Dispensing" contains very full particulars in regard to bismuth mixtures, and there you will find the questions you submit to us satisfactorily answered.

75/41. *St. John.*—Your query in regard to the interaction of phenazone and spirit of nitrous ether is dealt with in "The Art of Dispensing," edition 6, page 295. We may state briefly that iso-nitroso antipyrin is formed which is not poisonous, but on standing a small quantity of hydrocyanic acid is given off, insufficient in amount, however, to cause any toxic symptoms.

40/44. *Meyer's Reagent* sends us a prescription which originally was—

Potass. iodid... 5j.
Spt. ammon. co. ... 5ij.
Aq. chlorof. ad ... 5viij.

Ft. mist.

Cap. 3ss. t.d.

To this was added on December 23 liq. hyd. perchlor. 6 dr., and again on June 9 liq. strychniae, 1 dr. Our correspondent asks us what he should do in a case of this kind, and if he would be justified in using a "shake-the-bottle" label or excluding the liq. hyd. perchlor. A strictly justifiable course would be to use the "shake-the-bottle" label, but as the prescription is apparently a local one, it would be advisable to call the prescriber's attention to the fact that practically the whole of the strychnine added by the last amendment of the prescription will be precipitated as strychnine hydrargyrate, and it is likely that the patient will get an overdose of strychnine sooner or later.

55/73. *S. R. P.*—The best that we can make out of the directions is "The chest and back to be painted night and morning." Friction with equal parts of acetic turpentine and camphor liniments may not be desirable in the case.

77/30. *Curious.*—If you had the new edition of "The Art of Dispensing" you would save yourself the trouble of writing in regard to what happens when a mixture containing an alkaline iodide and nitrite are mixed with liquid extract of liquorice. The liquid extract on dilution with water liberates sufficient acid, if it is not already acid, to make the two salts react with liberation of nitrous oxide, and consequently of iodine.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

81/17. *F. A. H.*—A paper with the title "Drugs and Preparations for Use in Dental Practice" was printed in the *C. & D.*, December 5, 1891, page 807. The number is out of print.

27/31. *Phenol.*—(1) Cudding-drink:—

Pulv. aloes barb.	...	...	...	5iss.
Sal. communis	...	...	...	5ss.
Chloroformi	...	...	...	℥v.
Muc. tragacanth.	...	...	...	3xx.

Mix, and give in the evening twice a week.

(2) *Coffin-polish.*—A brush-polish, such as the following, is usually employed:—

Shellac	...	...	...	3viij.
Benzoin	...	...	...	3iij.
Resin	...	...	...	3iij.
Spirit	...	...	...	℥ij.

Dissolve.

53/32. *Atmosphere.*—You should have no difficulty in making a lecture on the atmosphere interesting. Taking as a basis the article on the Atmosphere in the "Encyclopædia Britannica," you can introduce many pretty experiments on the gases. A supply of liquid air from Brin's Oxygen Company, Westminster, S.W., would create much interest and make possible a number of unique demonstrations. You might also show samples of the newly found constituents of the atmosphere and the colour-effects of sparking through tubes of the gases.

64/3. *Marathon.*—(1) *Starch-glazing Tablets.*—These are made by intimately mixing an equal part of French chalk with melted white paraffin-wax. (2) *Non-greasy Toilet-cream:*—

Pulv. tragacanth.	...	...	...	5ij.
Ol. rosæ gran.	...	...	...	℥xv.
Spt. rectif.	...	...	...	5ss.
Glycerini	...	...	...	5iij.
Aque	...	...	...	5vj.

Dissolve the oil of rose-geranium in the spirit, and add to the tragacanth in a mortar; mix well, then add, all at once, the glycerin and water, previously mixed, and stir until uniform.

(3) *Self-glazing Starch.*—A formula for this was given in the *C. & D.*, July 21, 1900, page 110.

53/67. *C. S. D.*—*Sack-marking Ink.*—First prepare a basis by boiling together till dissolved—

Shellac	...	...	...	3iv.
Borax	...	...	...	3iij.
Water	...	...	...	3xx.

and for black ink add a mixture of drop-black 2 oz., powdered acacia 1 oz., rubbing together till homogeneous. Other colours are managed with Venetian red and Prussian blue. Another class of sack-marking ink is made as follows:—

Asphalt	...	...	...	1 lb.
Venice turpentine	...	...	...	1 lb.
Lampblack	...	...	...	4 oz.
Spirit of turpentine	...	...	...	3 pints

Mix.

52/53. *Devonian*.—**Liq. Pepsini et Euonymi** :—

Pepsin. (soluble)	3iv.
Ac. hydrochlor. dil.	3iij.
Glycerin	3iij.
Tr. euonymi	3iiss.
Aq. chloroformi	3iv.
Aq. distill. ad	3xx.

Dissolve the pepsin in the mixture of acid and water, then add the tincture of euonymus, and let the mixture stand overnight. Then filter through a filter-paper rubbed over with kaolin, and add the glycerin.

64/22. *E. & H.*—**Typewriter-inks**.—The following are the two types of inks used for typewriter pads and ribbons :—

(1)

Aniline dye (fat-soluble)	1 oz.
Carbolic acid... ..	1 oz.
Castor oil	1 oz.
Oil of cassia	½ oz.

Incorporate, using a little heat to overcome the viscosity of the oil.

(2)

Aniline dye (water-soluble)	3ss.
Acetic acid	3ij.
Distilled water	5x.
Glycerin	3iv.
Alcohol (90-per-cent.)	3iv.

Dissolve by rubbing in a mortar.

61/51. *Gentian*.—**Dry Shampoo** :—

Alcoholic ammonia	3iv.
Tincture of quillaia	3iv.
Ess. bouquet... ..	3ij.
Rectified spirit	3vij.

Mix.

31/1. *Chemicus*.—**Combined Toning and Fixing Bath**.—The peculiarity of your sample is its freedom from acidity, due to the absence of alum. It is prepared from a formula like the following :—

Sodium hyposulphite	3vj.
Sodium nitrate	3v.
Lead nitrate	3ss.
Gold chloride	gr. viij.
Distilled water	3xxxv.

3/3. *W. F. L.*—**Non-greasy Complexion-paste**.—See reply to "Maranthion" (64/3).

61/38. *Leo*.—Two pills are not sufficient to analyse and construct a formula from.

78/8. *Enfant*.—One-grain calomel powders with 2 gr. sugar of milk given indiscriminately to children do produce now and then severe sickness, not because of any peculiarity of the calomel, but owing to the condition of the child. In those cases where vomiting and severe sickness are produced calomel is obviously not required, and is really detrimental.

47/12. *W. S.*—The sample of Ointment "good for anything under the sun" is made as follows :—

Vaseline	3vj.
Lanolin	3vj.
Liq. carb. detergen... ..	3xx.
Ac. borici	3j.

M.

51/14. *S. A.*—**Powder for Nasal Injection** :—

Sodii bicarb.	3j.
Sodii bibor.	3j.
Thymol.	gr. v.
Pulv. sacchari	3j.
Ol. gaultheriæ	3vj.

M.

A teaspoonful, dissolved in warm water, to be used as a nasal douche.

87/36. *F. M.*—The compressed tablets used in preparing carbonated baths for the Nauheim treatment are made under a patent of Dr. Sandow. Messrs. Buchner, Schacht & Co., 55 Fore Street, E.C., are the agents for this country.

87/7. *Shields*.—(1) The discoloured bone-shields can be bleached by immersion in hydrogen peroxide or solution of sodium peroxide. (2) Hectograph-composition :—

Gelatin	1 part
Glycerin	4 parts
Water	2 parts

All by weight.

Soak the gelatin in the water overnight, add the glycerin, and dissolve in a water-bath.

This is the formula given by the original patentee (4,603, 1878), but the patent has now expired.

93/72. *Opium*.—**Metal-polishing Paste**.—See *C. & D.*, June 9, 1900, page 977.

93/18. *C. G. W.*—**Chemistry for the Apothecaries' Hall Examination**—Roscoe and Lunt's "Inorganic Chemistry for Beginners" (2s. 6d., Macmillan) or Roscoe's "Lessons in Elementary Chemistry" (4s. 6d., Macmillan) are suitable.

94/6. *M. P. S.*—**Ess. Sennæ Dulc.** :—

Inf. sennæ conc.	3x.
Ol. coriandri	3vj.
Theracæ ad	3xvj.

Heat the treacle, and add to the infusion, lastly stirring in the oil of coriander.

86/7. *Omega*.—**Woodbine-water and Plantain-water** are made by distilling the flowers of *Lonicera periclymenum* (woodbine or honeysuckle) or the fresh herb of either *Plantago major*, *P. media*, or *P. lanceolata*, 1 part with 3 parts of water until two-thirds of the liquid has passed over. The plantains are official in the French Codex.

Information Supplied.

NOTE.—Subjoined are replies to queries printed in previous issues as indicated by the numbers. It is requested that any writing to the firms named will mention "The Chemist and Druggist" as the source of their information.

69/49. **Cattle Insurance Company**.—The County Livestock Insurance Association, Clifford Street, York.

87/4. **I.X.L. fumigating-compounds** are made by G. H. Richards, 128 Southwark Street, S.E., and obtainable from the general sundry-houses.

1/1. *B. B.*—**Diabetic-beer**.—Harvey's sugar-free pale ale.—Harvey & Co., Pellon Brewery, Halifax; and Burgoyne, Burbidges & Co., Coleman St., E.C.

85/63 and 85/64. **Packers of goods in small parcels**.—Hillman, Gane & Co., 252 King Street, Hammersmith, W., and Mr. Lewis Vigis, Queen Square, Bath.

11/2. **Mr. Herbert W. Colley**, chemist, Grimsby, sends us, under date February 11, a cartoon of Hall's wine, which was fired by the sun shining through a cask filled with a yellow dye. It is interesting as showing the power of the sun even at this time of the year, and on a day when there had been snow-showers.

Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed.

94/9. Address of "Orrack's bottle people."

92/66. Address of makers of solid stencil-ink.

92/72. The address of the Anglo-Austrian Soap Company.

92/45. Makers of camphor-ice in round, flat, enamelled tin boxes, decorated.

87/21. Where may "Glyssol," a preparation used by printers, be obtained?

92/55. Makers of 6-oz. wide-mouth Mexican flints, those marked M in a diamond preferably.

Trade Report.

42 Cannon Street, London, E.C.: March 7.

WITH the exception of a little animation in one or two articles business generally has been quiet during the past week. The chief alteration since our last report is the reduction in iodine and preparations, which has been brought about by the arrival of crude Japanese iodine on this market. Quinine has not shown so much excitement this week as last, but the secondhand market has been fairly active, and the spot-price, after several fluctuations, closes higher on the week. Ipecacuanha is again dearer since the auction, and a fair business has been done chiefly in Cartagena description. Borax has been reduced by the Convention, probably with the idea of "cutting out" the small makers and secondhand holders, although it is reported that an upward reaction is quite probable later. Santonin was advanced to-day. The following table shows the principal alterations of the week:—

Higher	Firmer	Easier	Lower
Ipecac. Quinine Santonin Vanilla	Cocoa-butter Oil, anise star Oil, cod-liver	Arsenic Galls (c.i.f.) Oil, linseed Oil, palm	Antimony Borax Boric acid Iodides Oil, cubeb Oil, dill Opium Turpentine Valerian

Arrivals.

The following drugs and chemicals have arrived at the principal ports of the United Kingdom from February 28 to March 6 (both inclusive):—Acid, citric (@ Bordeaux), 20; acid, tartaric, (@ Marseilles), 44; antimony (@ Hamburg), 1000, (@ Shanghai), 100 cases; arrowroot (St. V.), 1490 packages, (Barb.), 23 barrels, (@ Trinidad), 16; balsams (@ Cartagena), 27 cases, 14 boxes, (@ Hamburg), 10 cases; benzoin (@ Singapore), 198 packages; bleaching-powder (@ Antwerp), 25; buchu, 28; canary-seed, 200; carraway-seed, 140; cascara sagrada, 528; castor oil (@ Amsterdam), 20 cases, (Ital.), 10, (Fr.), 461 barrels, 31 cases, 3 casks; chamomiles, 8; chillies (@ Madras), 24 barrels, (@ Kobe), 200, (@ Singapore), 50; chloralhyd., 4; cinchona (@ Mollendo), 22 barrels, (E.I.), 413, (@ Amsterdam), 62; cloves (@ Singapore), 98; cod-liver oil, 247; colocynth (Pers.), 6; croton-seed, 4; cumin-seed (@ Hamburg), 25; dragon's blood, 8; drugs (@ Panama), 12 barrels, 9 packages; (@ Callao), 7 cases, (@ Jamaica), 8 packages; galbanum, 22; galls (Chin.), 200, (Pers.), 1354; gentian, 34; ginger (Jam.), 377, (@ Calicut), 50, (Chin.), 1050; gum arabic (@ Bushire), 1397 bags; gum tragacanth, 875 cases; honey (@ N.Y.), 10 tons, (Jam.), 56, (@ San Francisco to Liverpool), 1604 cases, (@ Halifax), 5 casks, (@ Brisbane), 70 cases, (@ San Francisco to London), 98 cases, (Aust.), 47; insect-powder, 50; iodine, 32 kegs; kola (W.I.), 2; lemongrass oil (@ Cochín), 100; lime-juice (W.I.), 12 barrels, 6 puncheons, 2 casks, (@ Halifax), 21 puncheons; lime oil (W.I.), 7; liquorice-juice (@ Messina), 48 cases; nux vomica (@ Madras), 32; oils, essential (@ Sicily), 89 packages; opium (Pers.), 10, (@ Smyrna), 16; otto of rose, 2 cases; pepper (@ Cochín), 170, black (@ Singapore), 394; (@ Bombay), 175 bags; potash chlorate (Swed.), 100; potash prussiate, 20; quicksilver, 5000; roots (@ Constantinople), 39; sandalwood (E.I.), 1197; sulphur (@ Catania), 150 bags, 50 barrels, (@ Palermo), 2012 packages; vanilla (@ Hamburg), 1 case, (@ Auckland), 4 cases; wax, bees' (@ Hamburg), 23, (Mor.), 2, (Span.), 19, (Calif.), 19, (@ Dusseldorf), 173; wax carnauba (@ Pernambuco), 134.

Mysore Sandalwood.

The East India Association (Limited), 5 and 6 Billiter Avenue, London, E.C., has secured the exclusive rights in Mysore for the extraction of sandalwood and other essential oils.

Cablegrams.

BERGEN, March 7, 11 13 A.M.:—The cod-fishing has proceeded during the past week under stormy conditions, and the progress is not so good as was expected. The catch to date amounts to 6,039,000 cod, compared with 5,180,000, but

the livers are poor, and the increased catch is estimated to yield less oil—5,531 barrels, against 5,958, of unrefined oil. The market is rising, and 63s. per barrel, f.o.b., here is wanted for medicinal oil.

HAMBURG, March 7, 1 33 P.M.:—Cevadilla is rising, 90m. per 100 kilos, being the price. Camphor is quiet at 450m. for German refined, and ipecacuanha is advancing.

SMYRNA, March 7, 10 A.M.:—Sales of 15 cases of opium (talequale) have been made at a reduction of 4d. per lb.

NEW YORK, March 7, 2 56 P.M.:—The general tone of the market is good. Opium is easy at \$3 33 per lb. Balsam of copaiba is firm at 40c. per lb., Para balsam being 50c. per lb. Rio ipecacuanha is higher, \$3 per lb. being now wanted. Buchu is active at from 20c. to 30c. per lb. Balsam of tolu is strong at 32c. per lb. Oil of peppermint is hardening at \$1.10 per lb. Senega is dull at 37c. per lb.

Heavy Chemicals.

[These prices are for market centres other than London.]

Business in the heavy-chemical market still keeps unfortunately on the quiet side, and that, too, at all the principal centres, and there is nothing of special moment to be recorded. Export trade generally is slack, although matters will improve in this respect at an early date, particularly on the Tyne and Clyde.

ALKALI-PRODUCE.—All-round demand keeps about the same as recently reported. Bleaching-powder and soda-crystals show, perhaps, a little more activity. Caustic soda a shade quieter, but firm. Chlorates and yellow prussiates are very dull.

SOUTH DURHAM SALT is quieter, and has declined to 11s. per ton, f.o.b. Tees.

WHITE POWDERED ARSENIC keeps on the dull side, and now stands 17l. 15s. to 18l., ex ship Garston.

SATIN WHITE in steady consumptive demand, and firm at 5l. to 5l. 10s. per ton in ordinary casks, free on rails.

CALCIUM CHLORIDE.—Moving steadily at unchanged figures of 60s. to 65s. per ton.

SULPHATE OF AMMONIA.—Little is being done, the market being very quiet. Values are substantially as follows:—Beckton, 11l. 5s.; Beckton terms, 11l.; Hull, 10l. 15s.; London, 10l. 17s. 6d.; and Leith, 11l. to 11l. 2s. 6d. Exports from Leith last week amounted to 685 tons.

BICHROMATES OF POTASH AND SODA are moving fairly well, but keep weak in tone owing to continued continental competition. Home manufactures for English and Scotch deliveries stand respectively at 3½d. and 2¾d. per lb., less 4 per cent. Glasgow. Export prices, f.o.b. Glasgow, are ¼d. per lb. lower.

BROWN ACETATE OF LIME.—Rather quiet, but value is fairly steadily maintained at from 5l. 17s. 6d. to 6l. 2s. 6d. per ton.

SULPHATE OF COPPER is very dull, but at present stands at 23l. 15s., and therefore shows no quotable change. Anchor and Liverpool also unchanged at 25l.

Liverpool Drug Market.

Liverpool, March 6.

CASTOR OIL.—In consequence of decreasing stocks and small shipments near at hand, the value of Calcutta has appreciated, and now 4½d. per lb. is asked for the small stocks available. On the other hand, first-pressure French has receded, and 3½d. to 3¾d. is now being quoted from the quay, but notwithstanding a large arrival, there does not seem to be more than one or two sellers. It is expected that this grade will recover value promptly. Second press French is obtainable at 3¼d. to 3½d. per lb., according to position. First pressure English is held 3¼d. to 4d.

ACACIA.—Sales are reported of 23 serons soft Soudan sorts at 60s. per cwt. At auction 52s. was bid for 5 serons inferior, but the lot was disposed of later on privately at a higher figure. Twelve cases Niger Arabic found a buyer at 37s. 6d.

GRAINS OF PARADISE.—Show little or no movement, but holders are still firm at 90s. per cwt.

GALLS.—Dark-blue Smyrna are still held at 60s. to 67s. 6d. per cwt., but the amount of business passing is very limited, 6 bags being reported sold at 60s.

GINGER, AFRICAN.—There are no further transactions on the spot to record, but sales to arrive have been effected in quantity at 28s. 6d. per cwt., and there are now no sellers at this figure.

BEEWAX.—Chilian is moving off steadily, and 10 bags are reported sold at 7l. 7s. 6d. per cwt. Fine grades are held up to 7l. 17s. 6d., with very little available at the highest figure.

TURPS has exhibited a much weaker tone during the week, and the current quotation is 28s. 9d. per cwt.

LINSEED OIL.—Liverpool pressing in export casks is held 23s. 6d. to 25s. per cwt., according to position, an easier tone ruling in the market for the week.

CANARY-SEED.—More interest is being shown in Turkish, but up to the present no business of importance has been recorded. Value remains steady 33s. 6d. to 34s. 6d. per quarter, according to quality.

HONEY.—An intermittent demand has characterised this article, and sales are recorded of Pile I. at 28s., Pile II. 26s., Pile X. 33s. 6d. per cwt. No pile Peruvian and Chilian offer at about 21s. per cwt.

POWDERED WHITE ARSENIC is easier at 17l. 15s. per ton.

QUILLAIA.—Steady at 13l. 10s. to 13l. 15s. per ton.

German Drug Market.

Hamburg, March 5.

Business in general is still quiet here, although the present m'ld weather gives hope for an early and speedy opening of the inland navigation.

AGAR-AGAR is very firm and advancing, at 410m. per 100 kilos.

ALOES (Cape) is steady, at 56m. per 100 kilos.

CEVADILLA-SEED is firmly held at 85m. per 100 kilos.

QUININE advanced last week 2m. per kilo., 41m. per kilo. being asked to-day.

CARNAUBA WAX is a little easier; prices vary from 95m. to 145m. per 100 kilos., according to quality.

JAPANESE WAX is steady, at 60½m. per kilo.

COD-LIVER OIL is quiet; new non-congealing oil is quoted 68m. per barrel.

ACID, CITRIC, remains firm, and a good business has been done at 295m. to 300m.

ERGOT is tending firmer, though there are some stocks which are to be had at 490m. for good Russian, and 510m. for Spanish.

CAMPHOR (refined) suffered a reduction this week on the part of makers, and second-hand holders followed and reduced from 475m. to 460m., which price is still to-day's value.

LYCOPodium.—Considerable orders have reduced stocks, and for the moment 425m. must be paid.

IPECAC. (Carthage) has been in brisk demand, and a large business has taken place. Stocks now are exhausted, and the lowest price would be 16½m. per kilo. This has been one of the features of the week. About 100 kilos. only are on hand.

A German correspondent in the interior also favours us with the following letter:—

ERGOT—The scarcity is still apparent, and no important parcels are to be had. We anticipate higher figures for March-April and later on, as both Russia and Spain are very short.

BARBERRY-ROOT BARK is in regular demand; 1900 crop was small, however, as in many districts in Germany and Austria the authorities stopped the peeling.

CONDURANGO is very cheap at from 35s. to 40s. per cwt., c.i.f. London.

OIL, MALE FERN.—Ethereal is in brisk demand, and prices are advancing owing to raw material being very scarce. It is interesting to learn that the German authorities have recently prohibited the digging of male-fern roots, in order to save the plants in the forests. About 70 tons of this root is collected in Germany every year.

ARNICA-FLOWERS.—Stocks are small.

MULLEIN FLOWERS.—Low grades are sold out; fine grades are exceedingly high in price, and only small lots available.

BELLADONNA-LEAVES in good demand for fine varieties. Stocks are small.

HENBANE and STRAMONIUM LEAVES.—Fine qualities are scarce, but lower grades are obtainable at moderate figures.

FOXGLOVE-LEAVES are sold out, with the exception of a few small parcels of nice green leaves.

ALTHEA ROOT (cut). The 1900 crop is very small, and all demands cannot be satisfied. Prices are advancing, and owners do not care to sell, as they expect yet higher prices.

DANDELION ROOT in fair demand at low figures.

MUSK-ROOT is scarce at 50s. per cwt., c.i.f. London.

VALERIAN-ROOT.—Belgian is cheap at 24s., c.i.f. London.

COLCHICUM-SEED.—No stock available.

QUINCE-SEED.—Russian is rising.

American Drug Market.

New York, February 26.

Business continues good, and the tone of the market is firm, with values rather tending upward.

ALOES is slow of sale, but the market is firm owing to light stocks. Curaçoa is held at 4 to 4½c., and Cape at 6½ to 7c. per lb.

ASAFETIDA—Prime quality gum is selling readily at 30 to 35c. per lb.; inferior grades are firm at 25 to 30c. per lb.

BALSAMS, COFAIBA.—Central American is very firm at 38 to 40c., and Para is generally quoted at 50c., though supplies can be bought below this figure. Tolu is strong, and there are no sellers below 32c.

BUCHU-LEAVES are easy, and a nice green leaf can be bought at 22c. Yellow are offered from 17c. up.

CASCARA SAGRADA is offering more freely, and supplies are obtainable from 4½c. up, according to age and quality.

CONDURANGO-BARK is dull, and quotations are nominal; 14c. will buy.

HYDRASTIS (GOLDEN SEAL).—Competition is active, and values are more or less irregular. Quotations range from 54 to 58c. per lb., according to holder.

IPECAC.—Rio is moving upwards, and quoted at \$2.75 to \$3.

OPIMUM.—Demand is light, and quotations for case-lots have declined to \$3.37½.

QUININE continues firm, with manufacturers' quotations unchanged. Second-hands have only small supplies, and offer sparingly at 28c. for German and 27½c. for Java.

SARSAPARILLA.—Mexican is obtainable at 6½ to 7c. per lb. Demand is small.

SENEGA is dull, and while quotations of 38c. are nominally unchanged less than this will buy.

London Drug Statistics.

The following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses for the month of February, 1901, and to the stocks on February 28.

	February		Stocks		1901	
	Landed	Delivd.	1901	1900	Imprtd.	Delivrd.
Albes cs &c.	43	219	2,965	2,577	285	376
" gouds	—	268	766	160	—	268
Anise, star cs	11	—	59	54	11	—
Balsams, csks &c.	281	173	377	310	281	399
Cambor bgs	345	188	1,112	170	455	249
Cambor pkgs	621	698	3,524	2,130	1,124	1,439
Cardamoms, cs &c.	214	141	2,234	2,368	405	375
Cinchona pkgs	1,539	1,315	10,342	14,835	3,780	3,059
Oubels bgs	—	10	1,529	1,708	—	19
Dragon's blood, cs	14	28	120	110	14	41
Galls pkgs	296	277	2,730	828	1,459	1,168
Gums—						
Ammoniacum "	—	12	50	73	7	25
Animi & copal "	3,895	2,952	10,618	7,476	6,181	6,324
Arabic "	574	2,744	14,827	10,749	1,529	4,459
Asafetida ..	280	168	425	870	537	491
Benzoil	149	253	867	1,286	272	440
Damar "	210	542	4,089	4,555	702	1,175
Galbanum ..	—	—	12	14	—	4
Gamboge	2	26	165	285	2	51
Guaiaicum ..	—	2	31	70	—	8
Kauri tons	31	180	1,946	1,564	346	330
Kino pkgs	24	3	43	44	26	4
Mastic "	—	—	4	28	—	2
Myrrh, E.I. ..	54	34	203	312	73	48
Olibanum ..	1,034	155	2,745	2,536	1,675	381
Sandarac	133	85	753	690	347	186
Tragacanth ..	626	1,025	3,846	1,240	2,480	2,197
Ipecacuanha, Rio bls	20	65	187	140	50	174
" Cartagena pkgs	76	122	555	108	110	79
Jalap bls	—	98	224	295	—	107
Nux vomica pkgs	129	172	1,282	13	284	555
Oils—						
*Anise cs	10	24	165	171	20	28
*Cassia "	—	7	107	84	—	7
Castor pkgs	302	263	557	789	409	385
Cocoa-nut .. tons	59	62	105	374	129	172
Olive csks, &c.	436	202	834	1,117	631	292
Palm tons	6	1	9	6	2	2
†Quinine sulph. lbs	4,374	16,578	194,191	193,400	7,455	23,045
Rhubarb cbts	20	118	1,160	1,161	152	181
Sarsaparilla .. pkgs	37	104	153	335	218	215
Senna bls &c.	189	648	2,186	2,216	660	1,003
Shellac cs	4,941	3,547	41,177	43,272	11,670	7,211
Turmeric tons	—	53	377	217	—	99
Wax, bees' pkgs	336	454	1,055	1,362	614	955
" Japan "	80	23	6,110	350	75	90

* Stocks of aniseed and cassia oils lying at Smith's Wharf and Brewer's Quay are not included in this return.

† Includes the quantity at Red Lion, Bull, and Smith's Wharves; also the Docks.

The statistics of goods lying at City Commercial Wharf are not included in above returns.

Japanese Market.

Yokohama, January 24, 1901.

The year opened with dull trade, but menthol, dry ginger, are being sold at higher rates, and iodides are firmer in export articles, while in import articles there have been a few changes only since my last report. Market in general remains dull, and speculative business is absent.

In export articles, menthol is still advancing, and present

quotation is 7-30 yen to 7-40 yen per catty, at which figures some fair qualities have changed hands, chiefly for Europe and America. The price may go still dearer, owing to the high prices asked in producing-districts. Peppermint oil is also firmly held at 2-15 yen per catty. Dry ginger is very steady, holders are very firm, and are not anxious sellers at present. Some important transactions, amounting to 800 piculs, were made a couple of weeks ago at 13 yen, or a shade below quotations for Bombay. This season's harvest is said to be 20 to 30 per cent. more than last season, but farmers are now quoting 12 yen per picul in the interior, which is equal to 13-10 yen per picul, delivered in Yokohama. But orders from abroad have been larger than expected, so that exporters in general are anxious to purchase at the present price, hence there may be a fairly good business within the next few weeks. Refined camphor, in 1-oz. tablets, is still firmly held at 1-07 yen to 1-10 yen per lb., according to quantity. Iodides are in rather short supply, and new crop will arrive in May; the present quotations are: 3-60 yen per lb. for crude iodine; 3-65 yen to 3-70 yen for potassium iodide; 5-75 yen for iodoform; and 5-25 yen per lb. for resublimed iodine. Orders from both interior and abroad are fairly heavy, so that market is going firmer. Bleaching-powder is firm at 5-90 yen per case of 100 lbs., and copper sulphate is steady at 15-50 yen per 60 kilos., soda-crystals is firm at 1-70 yen to 1-75 yen per 100 lbs.

In import articles, condurango-bark is very slow of sale owing to low prices in Europe, and holders are anxious to sell at 75 sen per lb., with bid of say 50 sen per lb. Cocaine is unchanged at 9-65 yen per 25-oz. tin. Ergot has changed hands at 1-30 yen to 1-35 yen per lb., for fresh cargo, and some five or six cases can be had at same price, which figures are far below the European parity. Bismuth subnitrate is one of the chief articles of interest during the interval, and market is steady at 3-10 yen to 3-15 yen per lb., for 1,000-lb. lots, at which figure business has been done; importers quote 3-25 yen. Santonin is firm at 7 yen per lb., while for wormseed 23 yen to 24 yen per picul is asked, according to holders. Glycerin is in brisk demand at 35 to 36 sen per lb., in bulk. Thymol crystals are generally quoted at 8 yen per lb. Sugar of milk is still lifeless, owing to heavy stock; at present there are sellers at 25 yen to 25-50 yen per cwt., which is several yen below cost. Stock is estimated at 700 cwt. on this market. Quinine is very slow of sale and cheap, present quotation is 60 sen per oz., with no buyers. Saffron has reduced by 10 per cent.; there are sellers at 20 yen per catty for P.J. quality. Rio ipecac. is again lower at 7 yen per lb., nominally.

London Markets.

ACID, BENZOIC, made from the gum, is quoted lower by one maker at 5*d.* per oz.

ACID, CITRIC, is firm but unaltered at 1*s.* 5½*d.* per lb. for English, for prompt delivery, and 1*s.* 6½*d.* for forward.

ACID, TARTARIC.—For English make 1*s.* 1*d.* is now quoted, and foreign 1*s.* per lb.

ACONITE.—German is very scarce; the nominal quotation is from 48*s.* to 50*s.* per cwt.

ANTIMONY (BLACK) has been reduced to 25*s.* per cwt., and powder to 28*s.*, and Crocus to 35*s.* and 38*s.* respectively.

BORAX.—The combination have reduced their quotations 20*s.* per ton, and now quote crystals at 16*l.* and 17*l.* for powder. Boric acid has also been reduced to 25*s.* and 27*s.* per cwt., respectively.

CASCARA SAGRADA.—The sailer *Hildekel* has arrived at Liverpool with 528 sacks, but they are reported to have been sold on c.i.f. terms.

CINCHONA.—The N. V. Nederlandsche Veem cinchona-bark department at Amsterdam reports that the shipments from Java to Europe during February 1901 have amounted to 748,000 Amst. lbs., against 641,000 lbs for the corresponding period of 1900; 539,000, 1899; 700,000, 1898; 456,000, 1897; 546,000, 1896; 756,000, 1895. The total shipments during January and February have been: 1901, 1,748,000 Amst. lbs.; 1900, 1,256,000; 1899, 1,048,800; 1898, 1,656,000; 1897, 1,516,000; 1896, 1,516,000 Amst. lbs.

COCOA-BUTTER.—Rather firmer in auction, 60 tons Cadbury's "A" selling at 1*s.* 3¾*d.* to 1*s.* 3½*d.*, closing 1*s.* 3½*d.* per lb.

ERGOT is unchanged with small sales of Russian at 2*s.* 4*d.*; Saffron is quoted 2*s.* 3*d.*, c.i.f., or 2*s.* 6*d.*, spot.

ETHER.—It is reported from Berlin that the makers there have formed a convention, and they will endeavour to maintain present prices, as the production is gradually lessening.

GALLS.—Importers' prices for Persian galls for arrival are slightly easier, there being ready sellers at 57*s.* 6*d.* per cwt. for blue, 52*s.* 6*d.* for green, and 45*s.* for white, c.i.f. Retail sales of blue are reported at 62*s.* 6*d.* to 65*s.* for blue, on the spot, 58*s.* for sorts, and green 52*s.* 6*d.* Over 1,400 bags of Persian have arrived this week, but the bulk has been sold on c.i.f. terms, so that buyers' wants are mostly filled for the time being.

GENTIAN is tending firmer at from 14*s.* 6*d.* to 15*s.* 6*d.* per cwt., c.i.f.

GLYCERIN is unchanged, refined being quoted at from 59*s.* upwards.

GOLDEN SEAL.—Fair sales have been made on the spot at 2*s.* 4¾*d.* per lb.

GUM ARABIC.—Good pale soft Soudan sorts have been sold at 70*s.* to 75*s.* per cwt., and fine pale picked at 90*s.* A considerable quantity of so called Persian insoluble is now arriving, and bids of lower prices have been made and refused. Sales of ordinary unworked sorts are reported at 17*s.* up to 18*s.* 6*d.* for small pale.

IODIDES.—The drop in iodine, which had been foreseen for some time, was officially announced by the combined makers on Friday last. Whether the reduction of 1*d.* per oz. in the crude material (now quoted at 6*d.*) will prove effectual in stifling the competition of Japanese iodides, is exceedingly doubtful. The following scale of prices has been agreed upon:—

	28 lbs.	Smaller wholesale quantities
Iodine, resub. ...	9 <i>s.</i> 9 <i>d.</i> net	10 <i>s.</i> net.
Iodoform ...	11 <i>s.</i> 5 <i>d.</i> net	11 <i>s.</i> 8 <i>d.</i> net
Sodium iodide ...	9 <i>s.</i> 7 <i>d.</i>	9 <i>s.</i> 10 <i>d.</i>
Potassium iodide, in 1-cwt. lots, 8 <i>s.</i> 3 <i>d.</i> per lb.; and less quantity, 8 <i>s.</i> 9 <i>d.</i>		14 lbs., 8 <i>s.</i> 6 <i>d.</i> ;

Japanese crude iodine to the value of 400*l.*, arrived in London on Monday, and this fact, together with a combination of other circumstances, has made the makers position untenable.

IPECACUANHA has been in good demand since the auction, up to 12*s.* 6*d.* per lb. having been paid for Rio for American account last week. Cartagena has sold at from 7*s.* 9*d.* to 8*s.* per lb., and the outside figure is now asked. To arrive, sales of a few hundred kilos. are reported at 7*s.* 3*d.*, c.i.f., but 7*s.* 4½*d.* is now quoted. The deliveries of ipecac. last month were 65 Rio and 122 Cartagena, and not 128 and 57 respectively, as stated in the monthly statistics; amended particulars have been issued.

MENTHOL is firm but unchanged at 13*s.* 6*d.* per lb., spot, for Kobayashi, and 12*s.* 9*d.*, c.i.f.

OIL, ANISE, STAR, is firmer, at 5*s.* 6*d.* per lb., spot.

OIL, COD-LIVER.—Our Bergen correspondent writes on March 2 that the stormy weather is still dominant and prevents the regular management of the fishery. The increase in the catch is not up to the expectation which the commencement of the fishery seemed to justify. The market is rather firmer at the last figure of 65*s.* per barrel, f.o.b., Bergen. The exports from Bergen to date amount to 1,181½ barrels, against 1,836 barrels at the corresponding period of last year. Private advices from Norway, dated February 28, also indicate that stormy weather is still greatly impeding the progress of the fishing, but prospects are still considered fair, and up to date the quantity of cod-liver oil manufactured in the Lofoten district is larger than that at the corresponding period of last year. The London market is firmer this week, although there is no quotable change in prices as yet.

OIL, CUBEBA.—English distillers have reduced their list-price to 4*s.* 9*d.* per lb.

OIL, DILL.—B.P. quality has been reduced to 12*s.* per lb., and ordinary to 9*s.*

OIL, PEPPERMINT.—The lowest quotation for American HGH is now 5*s.* 7½*d.* per lb., spot.

OPIMUM.—The London market is still quiet and easier. Fair druggists' opium has been sold at 9*s.* 6*d.* per lb. Fine soft shipping is very scarce, seconds can be had at from 10*s.* 9*d.* to 11*s.* No business is reported in Persian, and prices

are nominally unchanged at from 13s. 9d. to 14s. 3d. per lb. for fine, and 13s. to 13s. 6d. for medium; for arrival fine is quoted 13s. 3d., c.i.f.

CONSTANTINOPLE, March 2.—The position remains unchanged. The weather continues favourable to the sowings recently put underground, and this, in the absence of serious buyers, tends to cause a quiet market.

SMYRNA, February 22.—The market is quiet and unchanged, only 7 cases having changed hands at from 9s. 5d. to 10s. 6d. per lb., according to quality. No material change is expected to take place until the spring sowings are at an end and the result known.

QUICKSILVER.—The exports from Spain, Austria, and the United States for the twelvemonths ended December were:—

<i>Spain.</i>				
	1900	1899	1898	
Kilos. ...	1,100,609	3,221,101	1,741,392	
Pesetas ...	5,943,000	17,391,000	9,404,000	
(Peseta = 9·6 <i>d.</i> , or 25 to the £.)				
<i>Austria.</i>				
Kilos. ...	481,200	490,000	468,500	
Kronen ...	2,242,000	2,283,000	1,893,000	
(Krone = 10 <i>d.</i>)				
<i>United States.</i>				
Lbs. ...	778,191	1,264,372	981,497	
Dols. ...	426,000	610,000	441,000	

Complete statistics relating to the exports from Italy for 1900 have not yet been published.

QUININE.—At the end of last week the market closed easier, with a good business in second hands, mostly for spot delivery, at 1s. 2½d. per oz.; May, 1s. 3d. to 1s. 3½d.; June, 1s. 3½d.; and August, 1s. 3½d. The week opened with sellers at these prices, but on Tuesday the market was firmer again, 1s. 3d. being paid for spot, 1s. 3½d. for May, 1s. 3½d. for June, and 1s. 3½d. for August; and on Wednesday 1s. 3½d. was paid for spot, 1s. 3½d. for June, and 1s. 3½d. to 1s. 3½d. for August. Howards' advanced their quotation 1d., to 1s. 4½d. for 1,000-oz. lots and 1s. 6d. in vials. Whiffen's was also advanced 1d. To-day the second-hand market has advanced ¾d., business being done at 1s. 3½d. for spot and 1s. 4d. for August. B & S are not sellers, and their agents report that 1s. 3½d. has been refused for this brand; also that the Amsterdam brand was raised 1s. 3½d. to-day. P & G is quoted 1s. 3d.

The exports of quinine, quinine-preparations, &c., from Germany, for the twelve months ended December were as follows:—

—				
	1900	1899	1898	
Kilos. ...	184,800	210,900	2,009,000	
Marks ...	7,022,000	8,014,000	6,630,000	

SANTONIN has been advanced 2s. 3d. per lb., agents quoting 17s. net for small wholesale quantities, and 15s. 10d. net for 2-cwt. lots.

SARSAPARILLA.—For Honduras, J & C brand, which is scarce, 1s. 4½d. per lb., c.i.f., is asked from New York.

SCAMMONY-ROOT.—Fourteen bales have arrived this week, for which 32s. 6d. is wanted; 30s. has been refused.

SENEGA is slightly easier, at 1s. 8½d. per lb., spot.

SENNA.—Alexandrian has sold at 4½d. per lb. for good broken leaf.

SHELLAC.—At the auctions on Tuesday supplies were unimportant, and demand slow. Of the 290 cases offered, only 50 sold, including 25 cases second orange, at 62s. for good worked; slightly matted ditto, 52s. to 60s.; and dark red, 59s. to 60s. Of button 17 cases sold at 48s., subject, for weak dark thirds, and 35s. for low. The market privately is very dull, with small sales of fair TN orange at 60s. For arrival April-June shipment is quoted 59s. 6d., c.i.f.; March delivery has sold at 60s. 6d.

SPICES.—Business continues slow and sales of a retail character. The auctions on Wednesday were the smallest on record. There was no *Ginger* offered. Common *Ambosyna Cloves* sold at 4½d. to 4¾d. per lb., and *Penang* partly sold at

5½d. to 6d. per lb. for fair picked, good being bought in at 9d. per lb. Zanzibar are slightly lower at 4½d. per lb. on the spot, and at 4¾d. for June-August delivery. *Mace* sold at 1s. 4d. per lb. for middling palish red. *Pepper* is steady but quiet at 6½d. per lb. on the spot for Singapore black. Good bold washed Singapore white was bought in at 10½d. per lb.

THYMOL.—There are sellers in secondhands at 14s. 9d. to 15s., but, in view of the crop of new seed being due shortly, prices will be lower.

VALERIAN is lower, Belgian being offered at 22s. 6d. to 25s. per cwt., c.i.f.

VANILLA.—The periodical auction was held on Wednesday, when some 400 tins of Mauritius and Seychelles offered, the bulk of which sold at full rates for the Seychelles, and fully 1s. advance for new-crop Mauritius. Some of the prices paid were as follow:—Good to fine chocolate, 8 to 9 inches, 26s. 6d.; 7½ to 8½ inches, 24s. to 26s.; 6½ to 7½ inches, 22s. to 24s. 6d.; 5½ to 6½ inches, 20s. to 22s. 6d.; and 4 to 5½ inches, 18s. 6d. to 20s. per lb.

Coming Events.

Monday, March 11.

Dewsbury and District Chemists' Association, Church House, Church Street, Dewsbury, at 8.30. Annual meeting.
Imperial Institute, at 8.30 p.m. Public illustrated lecture on "Jamaica: the Isle of Springs," by Theodore H. Wardleworth, F.L.S.

Tuesday, March 12.

Royal Photographic Society, 66 Russell Square, W.C., at 8 p.m. "The Apochromatic Lens," by Dr. Harting.
Bradford and District Chemists' Association, County Restaurant, Bridge Street, Bradford, at 9 p.m. Conversation on trade-topics.
Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, W.C., at 8 p.m. Evening meeting: "Notes on some Essential Oils," by Mr. M. W. Allen and Mr. E. T. Brewis; "Copaiba of Commerce," by Mr. J. C. Umney; "An Adulterant of Stramonium-leaves," by Mr. J. Slinger Ward.

Wednesday, March 13.

Edinburgh Chemists', Assistants', and Apprentices' Association, 36 York Place, Edinburgh, at 9.15 p.m. "Reminiscences," by Mr. D. McLaren; "Dispensing Notes and Queries," by Mr. W. Duncan; and "Notes From the Front," by Mr. Hogg.
Sheffield Pharmaceutical and Chemical Society, at 8.30. Lantern-lecture, by Mr. J. W. J. Turner.
Newcastle-on-Tyne and District Chemists' Association, Hôtel Métropole, West Clayton Street, Newcastle-on-Tyne, at 8.30 p.m. Monthly meeting. Notes on "Chemists and the Food and Drugs Act," by Mr. Geo. F. Merson; "Percentage Calculation," by Mr. Duddridge; and "Half an Hour with the Microscope," practically illustrated.
Manchester Pharmaceutical Association, at 7.30 p.m. "Bacteria and their Products," by Mr. J. B. Wolstenholme.

Thursday, March 14.

Chemists' Assistants' Association, 73 Newman Street, W., at 9 p.m. Exhibition and short paper evening.
Nottingham and Notts Chemists' Association. Annual dinner.
Midland Pharmaceutical Association, Birmingham. Meeting postponed.
Liverpool Pharmaceutical Students' Society. Smoking-concert in the Kardomah Café.
Goldsmiths' Institute Chemical Society, New Cross, S.E., at 8 p.m. "Antitoxic Sera: their Preparation and Standardisation," by Dr. Jno. Eyre.
Liverpool Chemists' Association, Royal Institution, Liverpool, at 7 p.m. "The Ash of Drugs as an Indication of their Purity," by Messrs. R. C. Cowley and J. P. Catford; "Note on a Drug recently offered as Rhatany root," by Mr. P. H. Marsden.

The annual dinner of the School of Pharmacy of the Pharmaceutical Society of Great Britain will be held in the Holborn Restaurant on March 19. Tickets (5s. each) can be had from the Hon. Secretary of the Dinner committee, 17 Bloomsbury Square, W.C.

The annual dinner of the London Mineral-water and Bottle Exchange Association has been fixed for March 28 at the Hotel Cecil.